GRAMMAR OF PAINTING

AND

ENGRAVING

FROM THE FRENCH OF CHARLES BLANC

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$ 75.—

Jesse F. Slader

To Wm. S. Kerr

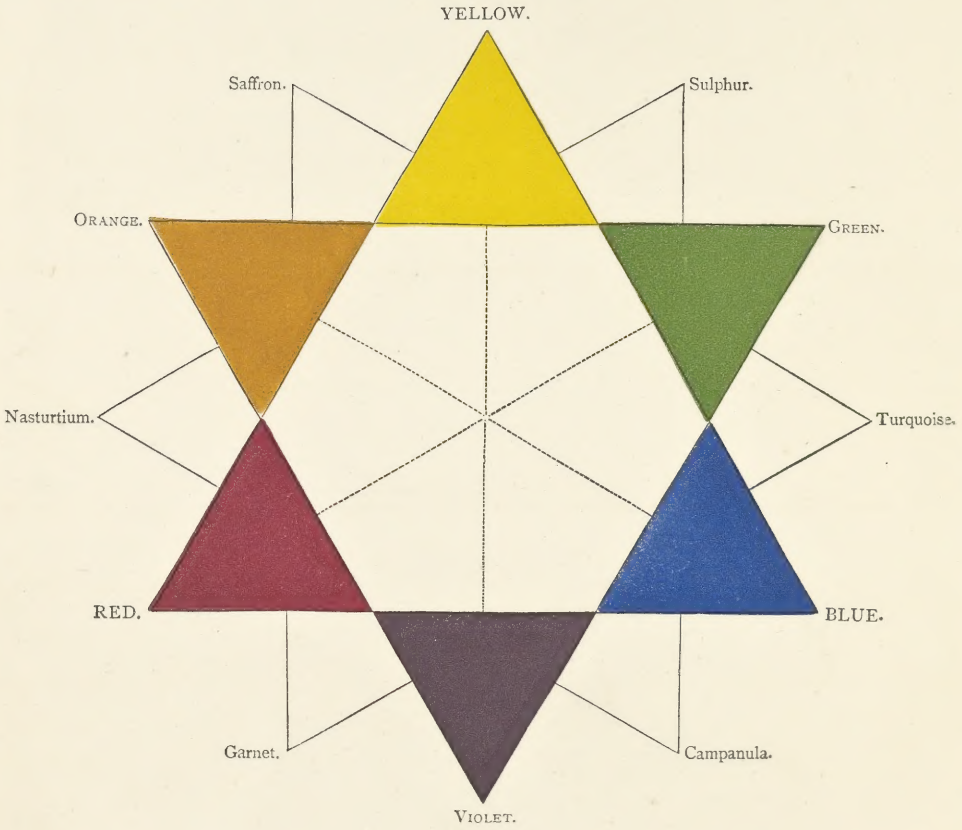
Christmas

1873

THE GRAMMAR

OF

PAINTING AND ENGRAVING.


YELLOW.
Saffron.
Sulphur.
ORANGE.
GREEN.
Nasturtium.
Turquoise.
RED.
BLUE.
Garnet.
Campanula.
VIOLET.

THE GRAMMAR

OF

PAINTING AND ENGRAVING

TRANSLATED FROM THE FRENCH OF

BLANC'S GRAMMAIRE DES ARTS DU DESSIN

BY

KATE NEWELL DOGGETT

WITH THE ORIGINAL ILLUSTRATIONS

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TRANSLATOR'S PREFACE.

THE same motives that induced Charles Blanc to write his "Grammar of Painting and Engraving" led to its translation, — the wish to place in the hands of those who are groping for reasons for the love they feel for the beautiful, a book that should teach them the principles that underlie all works of art; a book not voluminous enough to alarm, plain and lucid enough to instruct, sufficiently elevated in style to entertain.

> "For what delights can equal those
> That stir the spirit's inner deeps,
> When one who loves but knows not,
> Reaps a truth from one who loves and knows."

That Charles Blanc *knows* of what he writes, no one will doubt who follows his eloquent pages in the original. The translator hopes that faithful study and an honest endeavor to preserve the "inexorable clearness" of the French idiom, will not so far have failed as to make him unwelcome in an English dress.

The complaint of M. Blanc that the art-education of the young is so utterly neglected that later in life they are incapable of judging the works of sculptor or painter, is true here in a sense that cannot be true in France, where, at least in the large towns, the

constant presence of the best creations of Grecian and Roman genius, either originals or well-executed copies, are helps to an education that is wholly wanting to us.

There is the greater need that we should learn from books how to judge of works of art, that we may intelligently enjoy them in other lands, and intelligently choose from among them statues, pictures, prints, for the adorning of our houses, the pleasure of our friends, or the higher purpose of placing in galleries for the instruction and elevation of those who cannot journey far for mental and spiritual food.

Histories of art, in all its varied forms of development, histories of all the schools that have sprung up in ancient and modern times, are numerous, as are treatises upon the different branches of the plastic arts, but what we especially need is the A B C of Art, and that, it is believed, we must learn, not from its history or its philosophy, but from its grammar.

And so for this little book we would ask, as the author does for the original, the reader's patient and good-natured attention.

TO THE READER.

This book aims to instruct. It was written for those who have finished their scholastic studies, and who, at the moment of entering upon active life, desire to know its peaceful and poetic side. They are ignorant of the Art of that antiquity whose language they have learned, with whose heroic actions and thoughts they are familiar. But it is in the creations of the artist that the pure essence of the ancient philosophy is deposited; in them it assumed a tangible form; in them breathe the gods of Virgil and of Homer, rendered visible by metamorphoses more astonishing and more charming than those of Ovid.

The art-education of the young is completely null. The proud and brilliant laureate finishes his classical studies without getting the least tincture of it. He knows the history of the ancient Greeks, their captains, their orators, and their philosophers; has read of their intestine quarrels and their grand Persian wars, but he knows neither their sublime ideas upon painting and statuary, nor their adorable marble gods and their divine temples.

That public instruction is mute upon questions of Art is, doubtless, because of the predominance of

certain ill understood ideas. Many chaste divinities whose presence elevates and purifies the soul, are regarded as images enveloping the spirit of evil, and full of dangerous seductions. Hence the aversion of clerical institutions to the pagan arts, a sentiment that in our laic colleges is translated by silence.

France, formerly renowned for the excellence of her judgment and the delicacy of her taste, and who has at this moment in her capital the most skilful artists in the world, is, in all that concerns a knowledge of Art, one of the most backward nations in Europe. In England, the books that treat of art and the beautiful, are known to every well-educated person. Ladies, old and young, have read, either in the originals or in the innumerable reviews that treat of them, the writings of Burke, Hume, Reid, Price, Alison, the ingenious "Analyses" of Hogarth, and the grave "Discourses" of Reynolds. In Germany, the most abstract ideas of Art are familiar to an immense number of students. This science of the beautiful, or rather this philosophy of the sentiment that Baumgarten called the æsthetic, is taught in all the German universities. The lofty speculations of Kant upon the sublime, the strophes of Schiller upon the ideal, the spirited sketches and the humorous paradoxes of Jean Paul, the ideas of Mendelssohn, the polemic between Lessing and Winckelmann, the profound discourses of Schelling, the grand lessons of Hegel, all are understood and discussed by innumerable adepts. At Geneva also,

where there are teachers of æsthetics, the "Reflections" of Toppfer and the "Studies" of Pictet are much better known than the eloquent and luminous pages of Lamennais and Cousin are in France.

Here, on the contrary, where Art is living, enters everywhere, attracts and interests everybody, the ability to judge the works of the sculptor or painter seems completely foreign to our public. Official salons and private expositions are crowded with people without ideas, without information, and who, for want of rudimentary instruction, fall headlong into a sea of errors. Every day in the midst of this Paris that believes herself a new Athens, we see persons of distinction, naturalized Luculluses, millionaires, and wits, rush to the Hotel Drouot, as if to give a public spectacle of the most monstrous heresies; to-day indulging a caprice that a thousand boobies will imitate to-morrow, running up to scandalous amounts the price of screens, chiffons, or dolls by a seventh-rate painter, when the great masters, the august sovereigns of Art, are shamefully cheapened, and finally go out of the country unable to sustain competition with a pretty nothing of Watteau. Thus the France of the nineteenth century presents the incredible anomaly of an intellectual nation professing to adore Art, but knowing not its principles, its language, its history, its veritable dignity, its true grace.

This comes from the education we receive at college. Most young people at the beginning of their

career, attracted in manifold directions, neglect a study whose first elements have not been taught them. Some who might have had leisure for it hold aloof, from distrust of themselves, for want of proper initiation. The logic of things ought to fill this gap in public instruction. We must either proscribe antiquity altogether or remove the veil that covers the most beautiful works of her genius, works that are at the same time the noblest and most elevating. Such a reform would be more profitable to France than many battles, many conquests. We shall not be at the head of the nations till we shall have annexed to the domains of our intelligence the beautiful province in which flourish the gardens of the ideal.

Here let me tell how the idea of the present book was suggested. At dinner one day with the dignitaries of one of the largest cities of France, conversation turned upon the Arts. All the guests spoke of them and well, but each intrenched himself behind his own personal views by virtue of the adage: "On ne peut disputer des gouts." In vain I protested against this false principle, saying that, even at table, it was inadmissible, and that a distinguished magistrate, the classic *par excellence* of gastronomy — Brillat Savarin, — would have been shocked at such blasphemy. The authority of even his great name was not respected, and the guests separated gayly, after uttering heresies to make one shiver. But among the eminent men of the company, there was one

who, somewhat mortified that he had not the most elementary notions of art, asked if there were not some book in which those notions were presented in a form simple, clear, and brief. I replied that no such book existed, that upon leaving college I should have been only too happy to find such an one; that many works had been written upon the beautiful, treatises without number upon architecture and painting, and volumes upon sculpture, but a work covering the whole subject, a lucid résumé of all accepted ideas touching the arts of design, was yet to be conceived.

Thus was suggested the thought of this book. Embraced at first with enthusiasm, then abandoned, resumed again with new courage, this thought has long germinated in my mind. The difficulties to be encountered were great, for not only must one render a severe account of one's impressions and sentiments, but he must express himself upon subjects rebellious to all analysis, in a language whose clearness is inexorable. It is possible to treat æsthetics under the serviceable veil of the German language, for a people whom the twilight enchants and which is endowed with the faculty of seeing clearly in the dark, but in France, in the midst of a nation of the Latin race, whose indigenous good sense is a perpetual irony against dreamers, how was one to speak of the *subjective* and the *non ego*, of the *sublime dynamics*, and of all those things which, already sufficiently obscure, demand at least intelligible expressions, a

clear form despoiled of all pedantry, exempt from all triviality. What would Voltaire think, what would he say, could he open certain books upon æsthetics published since his day; if, for instance, he should read in Burke that "the effect of the sublime is to deobstruct the vessels, and that of the beautiful to relax the fibres of the body." Imagine what treasures of wit and good humor he would have added to his immortal pleasantry.

To be clear, was the most difficult, as it was the most imperative duty. The time has passed in which writers can shut themselves up in a sort of Freemasonry, interdicted to the vulgar. Nowadays one must write and speak for the multitude, and if there be a study that should be made easy, is it not the study of beauty and grace?

If I have not shrunk before the difficulties of the task, it was because I was sustained by the love of beautiful things, and the pleasure of making them known, trusting to the good nature of the reader and hoping for his interested attention. The sculptor Puget was accustomed to say, "The marble trembles before me." Animated by a very different sentiment, the author of this book would say, I tremble before the marble.

THE GRAMMAR

OF

PAINTING AND ENGRAVING.

Painting.

I.

PAINTING IS THE ART OF EXPRESSING ALL THE CONCEPTIONS OF THE SOUL, BY MEANS OF ALL THE REALITIES OF NATURE; REPRESENTED UPON A SMOOTH SURFACE BY THEIR FORMS AND COLORS.

THE offspring of a common cradle, Architecture, two arts issued one after the other from the maternal bosom, Sculpture and Painting. The latter in the beginning was nothing more than a coloration of the surfaces of the temple and its reliefs, a coloration symbolic rather than imitative. Later it detached itself from the walls; it became an independent art, living its own life, mobile and free. But even when completely emancipated it played only a secondary rôle. The art, *par excellence*, of mythological antiquity was not, could not be, painting; this we learn by induction, although time has spared us no ancient paintings except those of Pompeii which, in genius and culture, was a Grecian city. Under the empire

of mythology which referred all creation to man, and recognized in the gods only perfect men, rendered immortal by beauty, the favorite, the dominant art, must have been sculpture. Those beautiful realities, the rivers, the mountains, the trees and the flowers, the infinite heaven, the immense sea, were represented only by human forms. The Earth was a woman crowned with towers; the Ocean and its depths were figured by a boisterous god, followed by tritons and nereids; its roaring was only the sound of marine shells blown by half-human monsters. The bark of the oak concealed the modest Hamadryad, the green prairie was a couchant nymph, and Spring herself bore the name and tunic of a young girl. How could painting display its brilliancy and eloquence when Nature, which contains in itself the treasury of light, and in this treasury all the colors of the palette, was wanting to its representations?

What has happened? By what evolution has painting taken the first place? It is Christianity which has supplanted sculpture, by placing beauty of soul above that of the body. When a religion full of terror and impregnated with a melancholy poetry succeeded to the serenity of Paganism, the artist found above him only an invisible God; before him troubled and mortal beings. Dethroned from his pedestal, man falls into the midst of the accidents, trials, and griefs of life. He is plunged again into the bosom of nature. He wears the costume of the times in which he lives, and, subject to the

influences of the sky under which he is born, and the landscape that surrounds him, he receives their impressions, reflects their colors. The artist will necessarily represent the human figure by its peculiar, even accidental characteristics, for this painting will be the most fitting art, because it furnishes to expression immense resources, air, space, perspective, landscape, light and shadow, color.

In the domain of Pagan sculpture man was naked, tranquil, and beautiful. In the realm of Christian painting he will be troubled, modest, and clothed. Nakedness now makes him blush, the flesh is a shame to him, and beauty causes fear. Henceforth he will seek his pleasures in the moral world, he will need an expressive art, an art which to touch or charm him borrows all the images of creation. This art is painting. Aiming to express internal sentiments, painting has not, like sculpture, need of the three dimensions. Faithful to its primitive purpose, which was to decorate walls, it uses only smooth surfaces, plane, concave, or convex; for appearance suffices and must suffice. Why? Because if it were palpable it would become sculpture. The cubic reality would take from the image its essentially spiritual character and shackle the flight of the soul. Framed in real things, its expression would lack unity, would be contradicted by the changing spectacle of nature, by the ceaselessly varying light of the sun, and its factitious colors would grow pale, would fade out before those of the colorist, *par ex-*

cellence. The statue, elevated sometimes upon a pedestal, sometimes upon the capital of a column, or isolated in its niche, which forms a foundation, an abiding place for it, has an independent and separate existence, is a world in itself. Monochrome, it forms a contrast with all the natural colorations which, far from injuring its unity, enhance it, render it more striking. The painter, on the contrary, having to represent not so much *situations*, like sculpture, but *actions*, and all the infinitely varied scenes that pass upon the stage of life, must choose suitable natural objects to surround his figures, must find means to characterize the landscape and to complete the expression of it, that is to say, the light and the color.

Color is in painting an essential, almost indispensable element, since having all Nature to represent, the painter cannot make her speak without borrowing her language. But here a profound distinction presents itself.

Intelligent beings have a language represented by articulate sounds; organized beings, like animals and vegetables, express themselves by cries or forms, contour, carriage. Inorganic nature has only the language of color. It is by color alone that a certain stone tells us it is a sapphire or an emerald. If the painter can by means of some features give us a clear idea of animals and vegetables, make us recognize at once a lion, a horse, a poplar, a rose, it is absolutely impossible, without the aid of color, to show us an emerald or a sapphire. Color, then, is

the peculiar characteristic of the lower forms of nature, while the drawing becomes the medium of expression, more and more dominant, the higher we rise in the scale of being. Therefore painting can sometimes dispense with color, if, for example, the inorganic nature and the landscape are insignificant or useless in the scene represented.

Thus we find verified, one by one, all the members of our definition, the one being only the corollary of the other.

Painting, so often and for so long a time defined "the imitation of nature," had been misunderstood in its essence, and reduced to the rôle filled by the colored photograph. The end has been confounded with the means. Such a definition could not be maintained after the birth of that science of sentiment which we call æsthetics, after the day in which it became almost an art. There is now not a single critic, not a single artist, who does not see in nature, not simply a model to imitate, but a theme for the interpretations of his mind. One considers it as a *repertoire* of pleasing or terrible objects, of graceful or imposing forms which will serve him to communicate his emotions, his thoughts. Another compares nature to a piano, upon which each painter plays in turn the music that pleases him. But nobody would define painting as imitation, and confound thus the means with the end, the dictionary with eloquence.

If painting were simple imitation, its first duty

would be to paint objects in their true dimensions. Colossal figures as well as miniatures would be forbidden, for both are symbols rather than imitations, commemorative rather than imitative images. It would condemn the prophets of Michael Angelo as well as the little figures of Terburg and the diminutive pastures of Paul Potter, in which the cattle are no larger than the hand. Dwarfed or enlarged to this point such figures address themselves only to the imagination, forming no part of the real world. The mind alone renders them life-like. If it is true, for instance, that a man or an animal may appear as small as the hand when one perceives them at a great distance, it is also true that the eye sees them indistinctly, but the smaller the objects, the more exactly must they be painted, since they can only be seen near at hand, so that, while nature indicates distance by vagueness of form, the artist neutralizes distance by precision of form. One readily accepts these agreeable fictions, persuaded that painting is not the pleonasm of reality, but the expression of souls by the imitation of things. Thus it is no longer art which revolves around nature, but nature that revolves around art as the earth around the sun.

II.

WITHOUT AIMING EITHER AT UTILITY OR MORALITY, PAINTING IS CAPABLE OF ELEVATING THE SOUL OF NATIONS BY THE DIGNITY OF ITS REPRESENTATIONS, AND OF REFORMING THE MANNERS OF MEN BY ITS VISIBLE LESSONS.

A GREEK painter having represented, in one of his pictures, Palamedes put to death by his friends upon the perfidious denunciation of Ulysses, it is related of Alexander the Great, that every time he cast his eyes upon the picture, he trembled and turned pale, because it reminded him that he had caused the death of his friend Clitus. This story, which repeats itself every day in life in a thousand ways, makes comprehensible the force of the lessons that painting may contain. Without being either a missionary of religion, a teacher of ethics, or a means of government, painting improves our morals, because it touches us and can awake in us noble aspirations or salutary remorse. Its figures, in their eternal silence, speak more loudly and emphatically to us than could the living philosopher or moralist — men like ourselves. Their immobility sets our mind in motion. More persuasive than the painter who has created them, they lose the character of a human

work because they seem to live a loftier life and to belong to another, to an ideal world. The morality that painting teaches us is so much the more captivating because instead of being imposed upon us by the artist it is accepted by ourselves. The spectator respects and admires it, regarding it as his own work. Believing he has discovered it, he willingly submits to it, thinking to obey only his own thought.

Thus painting purifies people by its mute eloquence. Moreover, whatever may be the nature of its images, they always benefit the mind, at first because they address themselves to the mind and excite it, afterwards because in representing to us heroic actions or familiar things, they offer us a choice in life. "In sculpture," says Joubert, "the expression is all on the surface; in painting it ought to be within; in this, beauty is in *intaglio;* in relief in that." The philosopher writes his thought for those who can think as he does and who know how to read. The painter shows his thought to all who have eyes to see. That hidden and naked virgin —Truth — the artist finds without seeking. He puts a veil upon her, encourages her to please, proves to her that she is beautiful, and when he has reproduced her image he makes us take her and he takes her himself for Beauty.

In communicating to us what has been felt by others, and what perhaps we should never have felt ourselves, the painter gives new strength and compass to the soul. Who knows of how many impres-

sions, fugitive in appearance, the morality of a man is composed, and upon what depend the gentleness of his manners, the correctness of his habits, the elevation of his thoughts? If the painter represents acts of cruelty or injustice, he inspires us with horror. A certain scene in the Inquisition, in which Granet saw only the sombre effect of a dim light, will teach us toleration. A historical episode will tell us better than a book can do what we should admire, what hate. A painting in which one sees young negroes garroted, insulted, whipped, crowded into the hold of vessels, will bring about the abolition of slavery as surely and as quickly as the severest formulas of the law. "The Unhappy Family" of Prud'hon would move all the fibres of charity better than the homilies of the preacher. In a picture, nay, in a simple lithograph without color, Charlet has expressed by the physiognomy and gestures of a child, better still than by the legend written below the print, this sentiment of childish but exquisite delicacy: "Those to whom we give, we must not waken." A Greuze, a Chardin, without pedantry, counsel peace and honesty. Again, let a Dutch painter, a Slingelandt, a Metsu, represent to us, in a picture without figures, the preparations for a modest breakfast which awaits the master and mistress of the house, or only a cage of birds at a window, a bouquet of flowers in a vase, this simple subject has in painting not only a savor that the reality itself would not possess, but an unexpected signification, a moral value. Your thought

is carried at once towards the delights of the household, of family life. This little spectacle, individual though it be, answers to a general idea, and if it is presented by an artist who has been secretly moved or charmed by it, he will bring a whole world before the eyes of the imagination. You will feel the grace of private life, the *naïveté* and tenderness of the domestic hearth, the interchange of affectionate epithets, all that the ancients understood by that touching and profound word, house, *domus*.

Retired within a dwelling that has ever some door open towards the ideal, the true artist has generally a morality quite superior to that of ordinary men. We meet at the galleys, in the prisons, on the benches of the assize court, individuals of all professions. One never sees there an artist. "Doubtless the artist is the son of his epoch," says Schiller, in "Letters upon Æsthetic Education," "but woe to him if he be also the disciple, the favorite of it. Let some beneficent divinity snatch the child early from the bosom of its mother, feed him upon the milk of a better age, and let him grow up and attain his majority under the far-off sky of Greece. Grown to manhood, let him return, a foreigner, to the Present, not to delight it by his appearance, but rather, terrible as the son of Agamemnon, to purify it. It is true he will receive his materials from the present, but the form he will borrow from a nobler epoch, and even, outside of time, from the absolute, immutable unity of his own essence. Thence, issuing from the

pure ether of his celestial nature, flows the source of beauty, that the corruption of generations and ages never disturbs. His material, fancy may dishonor as it has ennobled, but the form, always chaste, escapes its caprices. For long the Roman of the first century had bent the knee before his emperors, but the statues always stood upright, the temples remained sacred in the eyes of those who jested at the gods, and the noble style of the edifices that sheltered a Nero or a Commodus protested against their infamous practices. When the human race loses its dignity, it is art which saves it. Truth continues to live in the illusion, and the copy will one day serve to reëstablish the model."

It is because painting is burdened with no official instruction that she gently forms us anew, makes us better. The law is less obeyed because it enforces obedience, moral teachers less heeded because they command. Art knows how to persuade, knowing how to please.

III.

PAINTING HAS LIMITS THAT LITERAL IMITATION MAY RESTRICT, THAT FICTION WIDENS, BUT THE MIND ALONE CAN ELEVATE.

WHATEVER may be the extent of its domain, and it is immense, painting has limits. These are not marked by a trenchant line, they insensibly melt into each other and are lost in the other arts whose frontiers begin before its are reached. More exact than music, painting defines sentiments and thoughts by visible forms and colors, but it cannot, like music, transport us into the ethereal regions, the impenetrable worlds. Less ponderous than sculpture and less the slave of the material used, it addresses itself to the mind by simple semblances, conquers space by means of a fiction, but not having the three dimensions of extension, cannot render beauty palpable to us, make it live in the midst of us, under the sun that enlightens us, and in the air that we breathe. Painting holds the middle place between sculpture that we can see and touch, and music that we can neither see nor touch.

Limited to the presentation of a single action of life, and in that action to a single moment, the painter has, it is true, the liberty of choosing; but

this liberty is not without limits, his choice is not unrestricted. If the limits of motion are infinitely broader for the painter than for the sculptor, he must avoid exaggerated, convulsive movements, as these offend the beholder in a representation that is to be lasting. The same is true of movements whose duration is offensive. It is unseemly to paint the portrait of a man bursting with laughter. The reason is apparent. Laughter is accidental, and if admissible in a composition that suggests it, where it does not fill the entire picture, it is repugnant to us to see a play of the muscles so fleeting, forever characterize a face, and immortalize itself upon the canvas, to impose upon us forever its stereotyped and unvarying grimace. On the contrary, in the portrait of a sad woman or a melancholy poet, there is nothing to displease, because sadness is less transitory in life than the burst of laughter, and the one, more in harmony with the permanent state of the soul, leads us back to it gently and without effort, while the other draws us from it abruptly and often with violence. There is after all nothing sadder than to have ever present the image of extravagant gayety, imprinted on the portraits of those who have ceased to live or who will soon be among our ancestors.

Thus painting does not always express all it is capable of expressing, does not pass to the limits of its domain. Doubtless, paroxysms of passion are not forbidden to it, but it shows greater skill to

suggest than to paint them. Diderot, the most impetuous and the boldest of critics, has shown that painting becomes greater by imposing narrower limits upon itself, and that, instead of representing a tragic *dénouement*, it is more fitting to announce it by indicating in the present action the moment that has preceded and that which is to follow. Suppose the painter wishes to represent the sacrifice of Iphigenia, should he place before our eyes the gaping and bloody wound which the knife of the priest has just opened? No, horror would be changed to disgust. But if he appeals to us at the moment the tragedy is preparing, if he paints "the victimarius who approaches with the wide basin that is to receive the blood of Iphigenia," he will thrill us with horror and delight, because the spectacle, as yet not being horrible, the horror of it will be imagined instead of seen. Each will conceive and feel it according to the constitution of his own mind.

A remarkable thing, which, however, I believe has not been noticed, is that the domain of painting ends just where the illusion of the senses ought to begin. It is certainly not unexampled that a picture should deceive the eye, at least for a moment. A Teniers, a Chardin, could paint a cake, a loaf of bread, oysters on the shell, in a way to excite the sensation of hunger. Velasquez has proven in his famous picture of the "Wine Drinkers," and in that of the "Aguador," or water-carrier of

Seville, that he could imitate a glass of water or one of wine in a way to excite thirst, and, for a moment, deceive the eye. Nevertheless, if the painter's ambition rested there, if he sought such triumphs of deception, he would soon pass the limits of his art. Admit that, to increase the illusion, he may add a factitious light to the light of day, let him light up his picture artificially from before or behind by means of certain transparencies, the illusion would be heightened, and the imitation having reached its utmost limit, would perhaps for the moment produce a greater impression than the reality itself. But we are no longer in the field of painting. Optical and physical phenomena, mingled with the resources of art, have made of the picture a diorama.

But what happens? This astonishing illusion produces at last almost the effect of wax figures. You see before you a real church, illuminated and filled with people, but they are motionless, and the church is silent as the desert. Or you are shown a real landscape, a Swiss view, over which your eye runs, which bristles with firs and rocks and is washed by a lake full of freshness, but this landscape that passes through all the changes of light, from dawn till sunset, contains only dead figures, cattle that neither live nor move, and boats frozen in a lake of lead. The greater the truth, the more the falsehood betrays itself; the more deceitful the painting, the less it deceives us. After a moment's

contemplation we comprehend nothing of this church in which priest and people seem to have been struck with paralysis; this resplendent choir in which no light shines, no shadow moves, we find unlifelike; impossible this Swiss landscape, in which, at all hours of the day, the figures are changed to statues, the animals glued to the ground. By a singular return of truth, the illusion which deceived us is precisely that which undeceives us. So true it is that man is powerless to imitate inimitable nature, and that in the art of the painter natural objects are introduced not to represent themselves but to represent a conception of the artist. So true is it, finally, that the semblance is a means of expression agreed upon rather than an absolutely imitative proceeding, since the last step in imitation is precisely that in which it no longer signifies anything.

The rôle, then, that fiction plays in art is important; but fortunately, fiction, instead of restricting the limits of art, enlarges, extends them. As upon the stage we have agreed to hear Cinna or Britannicus express themselves in French, so we allow the artist to paint upon his canvas a flying figure, or draw upon a vase in imitation of the Greeks, such or such figures incompatible with all illusion, all verisimilitude, as, for example, fauns and bacchantes that walk on the air without support, whose pure silhouettes, full of natural grace, move, flattened on a monochrome background, without *chiaro 'scuro* and without relief.

Everybody knows the story, that has been repeated to weariness, of the Greek painter who imitated a basket of grapes skillfully enough to deceive the birds. There is in this fable an essential and significant feature, a feature unnoticed, and that Lessing has recalled in the "Laocoön." The basket in the picture of Zeuxis was carried by a young boy. But the painter might have said: "I have spoiled my master-piece; if I had executed the child as well as the grapes, the birds would not have come near the basket for fear of the boy." It was only a vain scruple of modesty; one might have consoled Zeuxis by saying to him: Your figure painted with all possible truth would not have frightened the birds, because the eyes of animals see only what they see; man, on the contrary, looking at a painting, fancies movement in immobility, reality in appearance. What his eye does not see, he perceives in the depths of that dark chamber we call imagination.

Man alone has the privilege of being seduced, deceived by a secret connivance of his thought with that of the painter. Admirable illusion, which, without cheating the eye, gives change to the mind. Marvelous falsehood, which, by the complicity of our soul, moves us more forcibly than truth, like those dreams which are sometimes more sorrowful, sometimes more charming than life itself.

IV.

ALTHOUGH PAINTING IS THE EXPRESSIVE ART, PAR EXCELLENCE, IT IS NOT LIMITED IN CHARACTER, IT CAN UNITE EXPRESSION TO BEAUTY IN IDEALIZING ITS FIGURES BY STYLE, THAT IS TO SAY BY MANIFESTING TYPICAL TRUTH IN LIVING INDIVIDUALITIES.

THERE exists between expression and beauty an immense interval and even an apparent contradiction. The interval is that which separates Christianity from antiquity. The contradiction consists in this, that pure beauty — I speak here of plastic beauty — does not readily harmonize with instantaneous changes of countenance, with the infinite variety of individual physiognomy, and with the endless mobility of the same physiognomy undergoing the innumerable impressions of life, and passing from serenity to terror, from gayety to sadness, from the grimaces of laughter to the contortions of grief.

The stronger the expression, the more physical beauty is sacrificed to moral beauty. That is why pagan sculpture is so measured in its expression. Instead of concentrating it upon the face which it would have disfigured, the sculptor lets it permeate the whole figure; he puts it in the gesture,

which is the expression of the soul in movement, or in the attitude which is its expression in repose. The frightful cries uttered by Laocoön in the grasp of the serpents, the antique sculptor has reduced to sighs, that he might not disfigure the features of his hero; but the poet has reproduced these cries, *clamores horrendos*, and the painter can represent them, but he must restrain himself within certain limits if he wishes to choose the side of dignity and grandeur. He must idealize his figure by style.

What do these words signify? For the painter as for the sculptor, to give style to a figure, is to impress a typical character upon that which would only present an individual truth. Thus painting, when it aims at style, has a tendency to draw near to sculpture. But between the two arts there is a sensible difference. An animated expression that might be represented upon canvas would be shocking in marble.

It is repugnant to the sculptor to express certain vices which by their baseness would make the face ugly; but the painter can depict them. Yet, to preserve the conditions of style, he must seek generic accents. If, for example, he wishes to paint a hypocrite, this hypocrite must have all the traits of hypocrisy, must appear to us, not as a Tartuffe, but as Tartuffe himself.

Vile instincts, gross sensuality, lechery, drunkenness, all that makes man like the brute, sculpture

dared not represent in the human face; therefore antique genius sought in the depths of the water tritons and syrens, in the woods the goat-footed satyr, the sylvan faun and the centaur. The great artists of antiquity would not mar the beauty of



FIGURE D'EXPRESSION. BY MICHAEL ANGELO.

man by the signs of degrading passions, they contented themselves with sculpturing human vices in the precursors of humanity, in those beings not yet enfranchised from original bestiality, that were nevertheless respected, as savage ancestors, as the imperfect and mysterious gods of primitive nature.

But what sculpture refused to immortalize in marble or bronze, what she would not render palpable, the painter traces upon canvas, because instead of presenting tangible bodies, the canvas presents only impalpable images; instead of offering us the thickness of things she offers only the mirage. *Real*, ugliness is forbidden to sculpture; *apparent*, painting does not reject the ugly, because it has a thousand means of mitigating its expression, of rendering it acceptable by the prestige of light and the language of color, by accompanying circumstances, by the choice of accessories. When Raphael introduced deformity into a work of style, as in the famous cartoon, "The Cure of the Lame Man" at the gate of the temple, he redeems and elevates it by effacing the purely accidental features, which would but impoverish the composition, to insist upon decisive, characteristic features. Seen on a grand scale, the deformities of nature lose their miserable aspect, and may appear in the loftiest representations of painting, whether transfigured by the soul of the artist or used as a striking contrast to beauty itself.

Style, then, in the art of the painter is not exactly what it is in the art of the sculptor. One adores beauty to such an extent as to fear expression, which he lessens; the other seeks expression, not even rejecting ugliness, which he idealizes.

V.

PAINTING CAN ELEVATE ITSELF TO THE SUBLIME, BUT BY THE INVENTION OF THE ARTIST RATHER THAN BY THE APPLIANCES PECULIAR TO HIS ART.

IF the sublime be, as it were, a view of the infinite, it would seem that the arts of design, which are compelled to imprison every idea in a form, cannot be sublime. It may happen nevertheless that the painter, moved by thoughts to which he has given no form, strikes the soul as a thunderbolt would the ear. It is then by virtue of the thought perceived but not formulated that the picture becomes sublime.

Examples are rare. With regard to the sublime, Rembrandt was the Shakespeare of painting. The Gospel several times inspired him with ideas which have been rendered by no contour and are indicated only by the impalpable expression of light. There is a hasty sketch by this great painter, in bistre, of "The Supper at Emmaus." The artist wished to translate the passage of Scripture, "Then their eyes were opened and they recognized him, *but he disappeared from before them.*" In the drawing of Rembrandt the figure of Christ is absent, and upon the seat from which he has just vanished,

we see only a fantastic and mysterious light. Astonished, frightened at the disappearance of their guest and the appearance of this light, the two disciples devour with their eyes the vacant and illuminated seat where a moment before they touched the hand of a friend, heard his voice, and broke bread with him. Is not that a stroke of sublimity, that impalpable light expressing at once a vanished God, an invisible God?

Nicholas Poussin touched the sublime when he conceived one of his most celebrated pictures, "The Shepherds of Arcadia." In a wild, woody country, the sojourn of the happiness sung by the poets, shepherds walking with their loves have discovered under a thicket of trees a tomb, with this half effaced inscription, *Et in Arcadia ego* (I, too, lived in Arcadia). These words issuing from the tomb sadden their faces and the smiles die upon their lips. A young woman, nonchalantly leaning upon the shoulder of her lover, remains mute, pensive, and seems to listen to this salutation from the dead. The idea of death has also plunged into a reverie a youth who leans over the tomb, with bowed head, while the oldest shepherd points out with his finger the inscription he has just discovered. The landscape that completes this quiet and silent picture shows reddened leaves upon the arid rocks, hillocks that are lost in the vague horizon, and afar off something ill-defined is perceived that resembles the sea. The sublime in this picture is just that which one

does not see; it is the thought that hovers over it, the unexpected emotion that fills the soul of the spectator, transported suddenly beyond the tomb, into the infinite unknown. Some words engraved upon marble are here the only form, the only sign of the sublime. The painter remains, as it were, a stranger to the moral shock the philosopher has wished to impress upon us. A greater painter than Poussin, Rembrandt was able, in some sort, to bring the sublime within the appliances of his art in expressing it by light.

It is moreover with poetry as with painting. The touches of genius of a Shakespeare, a Corneille, as well as the grand passages of Scripture, have no form, or have one in which art plays no rôle; hence they can be translated into all the languages of the world. Emanating from the sentiment of the infinite, the sublime in painting could not be attached to a form, girdled by a contour. Whether it burst forth in the work of Rembrandt, or is divined in the picture of Poussin, the sublime is intangible as light, invisible as the soul.

VI.

THE METHODS PECULIAR TO PAINTING FORCE THEMSELVES UPON THE ARTIST AS SOON AS HE INVENTS HIS SUBJECT, AND CONCEIVES THE FIRST IMAGE OF IT.

THE aim of the arts of design being to manifest the beautiful, to render it visible and palpable, the plastic or representative form is essential, peculiar to them. For painting, especially, the means are optical, because it translates sentiments and ideas upon a smooth surface, and its images, merely appearances, do not depend upon the touch, which is the sight of the body, but upon sight, which is the touch of the soul.

To invent, for the painter, is to *imagine*, to bring before his eyes the persons and things that he evokes in his imagination, under the empire of a sentiment that animates him, or a thought that besets him. Here the grandeur of painting is at once attested by the first of its laws, which is to *choose* the sentiments or thoughts it will express, the figures it will represent, the theatre of action, the character of the accompanying objects. The poet, the writer, know of no monster so odious *that art cannot make pleasing to the eye*, because the eyes to which poetry

speaks are those of the mind; but the painter of ignoble spectacles does not relate them; he shows them, and having but an instant in which to show them, his images strike us without warning, without preface; they are not only ignoble, but coarse; they disgust us. The first law, then, of painting, is to avoid hideous or repulsive subjects.

Many people, it is true, affect to think that all subjects are good, and there is nothing ignoble in painting; that there are no gluttons, no baboons that the wit of Teniers does not make pleasing, that there is no dirty vagabond under the pencil of Brauwer, that Ostade interests us in the deformed, or rather unformed peasants that dance in a cabaret with the elegance of bears, — but, if we admit this, we must add that painters are not ignoble when they do not intend to be so, or when their representations are redeemed by a stroke of satire. When Brauwer seeks vagrants in their cellars to imitate their horrible grimaces, and their red, drunken faces; when he so sympathetically paints them vomiting wine and insults, he employs a talent full of warmth, delicacy, and harmony, to make us pardon what he wishes to make us admire.

As soon as he chooses a subject, the artist should think of the *picturesque* and distrust the literary beauties which may have charmed him in the books or recitals that have inspired it. What a painter should borrow from a poet, is not what he has read in his poems, but what he has *seen;* the living, acting idea, the sentiment when it becomes movement.



VOLTAIRE'S STAIRCASE.

Suppose a painter wishes to express what he has heard, or has thought himself, that Voltaire is the personification of the eighteenth century, that all proceeds from his genius and is to be absorbed in it again, that he is the centre whence issue and to which return all the rays of philosophy. How could he give a picturesque form to an idea so metaphysical, so abstract? An artist who excels in invention has solved this problem in the happiest, the most admirable manner, in one of those cartoons ordered by the State, in 1848, for the monumental decoration of the French Pantheon. This cartoon represents "The Staircase of Voltaire." We see ascending and descending all the philosophers of the times, all distinguished for intelligence, with the exception of Rousseau, who, in the eighteenth century, was the precursor of ours. Placed at the top of the stair-way, Voltaire is dismissing one of his visitors, d'Alembert, to whom he gives an article for the "Encyclopædia." Upon a lower step Diderot awaits the termination of the adieus to accompany d'Alembert. Thus are formulated in vivid images, in speaking figures, speculations of the mind that one might have thought foreign to painting, and it is by methods peculiar to it, that painting has expressed them, by making them visible, giving them a body.

In this same series of cartoons in which picturesque invention abounds, and which were to form a universal history and palingenesis of the human race, the author, Paul Chenavard, has consecrated one of the

grandest compositions to the obscure beginnings of Christianity, when the new god was noiselessly sapping the foundations of pagan Rome. This vast scene is divided into two horizontal zones. In the upper, filled with sunlight, passes the pompous and noisy cortége of a triumphant Cæsar, with his lictors, his generals, his trophies, his conquered prisoners, his eagles, and his elephants. The lower zone, silent and dark, represents the first Christians at prayer in the Catacombs, which they have dug like a tomb under the steps of the conqueror, and in which the Roman Empire will soon be broken up. It is impossible to relate history more clearly and vividly by the figurative language of art, mute language that engraves itself upon the memory of peoples in ineffaceable lines, like the eloquence of the Athenian orator which left its needles in the heart.

Invention is a rare quality among painters, rare even among the great masters. Leonardo da Vinci, that investigating genius, profoundly inquisitive, a prey to all the disquietudes of his art, advised his pupils to look sometimes attentively at the accidental spots upon old walls, the jaspered stones, the veins of marble, the shadings, as things offering to an idle imagination singular combinations of lines and forms and unexpected *motives*. Generally when they invent, painters only find, *invenire*, in fable, poetry, religion, history, subjects already invented by the poets, already illustrated and consecrated by tradition. As if imagination were a faculty rather Northern and

Germanic, there have been few inventors more powerful than Albert Dürer and Rembrandt. Moreover, it has been agreed to regard as an invention of the painter, every new manner of conceiving a known subject.

Why are the men of the North more inventive? Perhaps because they are more habituated to interior life, to meditation, reflection. Solitude is imperative to facilitate that prolonged attention, that persistent and profound meditation, which are the source of great thoughts, because, little by little, warming the mind, they end by enkindling enthusiasm. As a miser ever finds opportunities for acquisition, because always thinking of it, so the artist can find means of enriching his mind if his thoughts are ever thus directed. Meditation is precisely what the painters of to-day lack. Impatient to produce, urged on, eager to follow the breathless march of a civilization driven by steam, they do not give themselves time to meditate, and that in an art for which all the men of genius have worked as if they had no genius. "Painting," said Michael Angelo, "is a jealous Muse; she desires lovers who give themselves up to her without reserve, with undivided heart."

Again, whether he invent his *motives*, or discovers them in a poet, or renews them from the ancients, the painter ought to conceive them in vivid figures, and, drawing them from the vague obscurity in which imagination perceives them, make them visible, palpable. If he is not the first creator of his thought,

he ought to recreate it by rendering that which was poetical picturesque, by making a representation what was only an idea, a sentiment or a dream.

Thus from the moment of the birth of invention the art of the painter is distinguished from all other arts. For the pleasure of citing a hemistich of Horace the resemblance of painting to poetry has too often been affirmed. It is fitting, in this book, to show, not only the bonds that unite them, but the limits that separate them.

VII.

THE FIRST MEANS THE PAINTER USES TO EXPRESS HIS THOUGHT IS ARRANGEMENT.

ONE day when Prud'hon was dining at the table of M. Frochot, prefect of the Seine, that magistrate expressed the desire that Prud'hon should paint a picture to hang in the hall where the assizes of the criminal court were held, and, in speaking of the effect to be produced upon the accused, he quoted these verses of Horace: —

"Raro antecedentem scelestum
Deseruit pede pœna claudo."

"It is seldom that limping punishment does not overtake the criminal it pursues."

At once Prud'hon rose and asked permission to trace with a pen the desired picture, of which the whole arrangement had presented itself to his imagination. With the eyes of his thought he saw the flying criminal, *antecedentem scelestum*, and Justice appeared to him, not limping as the poet represents her, but cleaving the air in rapid flight and accompanied by another winged figure, divine Vengeance. Prud'hon did not invent the subject, but he invented

the arrangement, and he invented it with the genius of a painter, by transfiguring the written image, giving it wings, instead of crutches. In a moment he had indicated the great lines, sketched the figures and their drapery, represented their pantomime, balanced the masses, arranged the picture. Such are the operations that constitute what we mean by arrangement, and what we also call composition; but this latter word, whose signification is more extended, includes the invention of the painter and the economy of his picture, to such an extent that it is often used as a synonym of the picture itself. In its more restricted acceptation, the composition is only the arrangement, that is to say, the art of putting in *order* the elements of the picture, of disposing them, combining them, or, if one pleases, of distributing the rôles to the actors of the drama, for the Greeks called the composition the *drama* of the painter, that is the *mise en scene*, without which the composition alone would be the whole painting.

Two things are to be observed and reconciled in the arrangement, — its optical beauty, that which responds to the pleasure of the eyes, and its moral or poetical beauty, that which touches the feelings. The first of these would be the most important, and might almost suffice if the composition were purely decorative, as would be, for instance, a painting representing the pleasures of the harvest or the vintage. But if the picture appeals to the mind or heart, if it aims to excite the passions, the moral character of the



EXAMPLE OF SYMMETRICAL COMPOSITION. ENTHRONED VIRGIN, BY GIO. BELLINI.
(Academy of Venice.)

arrangement should take precedence of the picturesque, which ought pitilessly to be sacrificed to the expression if it is impossible to obtain both, to strengthen one by the other. "Touch me, astonish me, rend me, make me tremble, weep, shiver, anger me, you may gratify my eyes afterwards if you can." So said Diderot.

In the Gothic ages, when art was still in its infancy, painters scarcely knew of more than one arrangement, — symmetry; and there were several reasons for this naïve arrangement: first, the timid ignorance of the early painters, who would have been embarrassed at a complicated composition, afterwards a sort of pious ingenuousness and respect for sacred subjects; for there is in symmetry something sacramental and religious, because it corresponds to a sentiment of immobility, of meditation and silence. Besides it was not by movement and life that the arts began. The first pictures, as well as the first statues, have a stiffness, a grave and quiet look that, by means of symmetry, becomes solemn.

In the human body, which is perfectly symmetrical, the symmetry is apparent only when it is rigid and motionless. As soon as the human figure moves, the symmetry is broken by the movement, and in the foreshortenings of perspective it escapes notice. The figure, however, does not lose its symmetry; what was a coldly rigid regularity is replaced by another kind of symmetry, which is equilibrium. The same phenomenon manifests itself in art. As soon as it has

attained maturity, feels itself bold and strong, it abandons symmetrical compositions and substitutes for them equilibrium. Instead of arranging its figures in equal number, to right and left of the centre, painting introduces a certain balancing of corresponding masses, compensates for the similitude of lines and figures by the opposition of equivalent groups, so that under the appearance of a facile liberty the composition maintains its equilibrium, and the eye, secretly charmed, takes pleasure in the variety of the arrangement, without perceiving the artificial and concealed symmetry of it. This happens at the moment of virility, when painting advances from Giovanni Bellini to Titian, from Verocchio to Leonardo, from Ghirlandajo to Michael Angelo, from Perugino to Raphael.

Of this transition from traditional and measured art to free and vigorous painting we may see an illustrious example in one of the stanze of the Vatican. Opposite the "Disputa," of which the upper part is arranged according to the laws of the primitive regularity, Raphael has painted "The School of Athens," which is not only a *chef d'œuvre* of invention, drawing, style, and expression, but is an incomparable masterpiece of composition, the last expression of genius in arrangement.

At the first look it is a fine disorder of figures that seem grouped by chance meetings or isolated by chance. There is such perfect verisimilitude in the manner in which the groups are separated from and yet united with each other, the gaps are so naturally

filled or so happily managed, that one scarcely suspects the intervention of art, in a combination nevertheless so well meditated and so wise. Not having put any apparent symmetry in the order of the figures where it ought to be broken by life and movement, Raphael has put it in the immovable things, the architecture and the statues, to redeem by the solidity of the foundation the simulated disorder of the picturesque arrangement.

In addition, Raphael has supposed the spectator placed in the axis of the vaulted edifice which shelters this imaginary reunion of all the Greek philosophers. But as no one personage should dominate in so august an assemblage, presided over by the invisible spirit of Philosophy itself, no figure is placed upon the median line that passes between Plato and Aristotle, the two geniuses who will forever dispute the empire of souls, because one personifies sentiment, the other reason. This is not the place to notice the exquisite propriety with which all these heroes of the old world of intelligence are characterized; Pythagoras writing his harmonic tables, Epicurus crowned with vine leaves, the grave Heraclitus, the cynical Diogenes, Socrates arguing, Plato indoctrinating his own enthusiasm, Aristotle explaining experiments, the Pyrrhonian smiling at his doubts, the Eclectic gathering up his notes, Archimedes tracing on the ground his geometric problems, the astrologer Zoroaster, the geographer Ptolemy. If one considers only the beauty of

the arrangement, " The School of Athens" is a model forever admirable of the art that Raphael has inaugurated, of multiplying figures without confusion, of peopling a canvas without overloading it, of securing equilibrium without symmetry, and of diffusing unity, without destroying it, in a charming variety.

Unity, that is the true secret of all composition. But what is unity with respect to arrangement? It signifies that in the choice of the great lines a certain character should govern, that in the disposition of the parts there should be a dominant. Why? Because if man has two eyes he has only one sight, and he has only one sight because he has but one soul.

Straight or curved, horizontal or vertical, parallel or divergent, all the lines have a secret relation to the sentiment. In the spectacles of the world as in the human figure, in painting as in architecture, the straight lines correspond to a sentiment of austerity and force, and give to a composition in which they are repeated a grave, imposing, rigid aspect.

The horizontals, which express, in nature, the calmness of the sea, the majesty of far-off horizons, the vegetal tranquillity of the strong, resisting trees, the quietude of the globe, after the catastrophes that have upheaved it, motionless, eternal duration — the horizontals in painting express analagous sentiments, the same character of eternal repose, of peace, of duration. If such are the sentiments the painter wishes to evoke in us, if such is the character he wishes to stamp upon his work, the horizontal lines should



A Balanced Composition.

THE SCHOOL OF ATHENS. BY RAPHAEL.

dominate in it, and the contrast of the other lines, instead of attenuating the accent of horizontality will render it still more striking. Witness "The Testament of Eudamidas;" in it Poussin has repeated the horizontal lines. Lying upon his death-bed, the citizen of Corinth forms the dominant line of the arrangement. The lance of the hero repeats this line and, prostrate like him, seems condemned to the repose of its master and to affirm a second time his death. The figures of the physician, the mother, and the scribe are here opposed to the horizontal, but the contrast has a little too much importance, and in disputing the principal disposition enfeebles the unity.

Look now at "The Life of Saint Bruno," by Lesueur, in that admirable series of naïve and touching pictures. The solemnity of the religious sentiment, which is an ascending aspiration, is expressed in it by the dominant repetition and parallelism of the verticals; and this parallelism, which would be only monotony if the painter had had other personages to put upon the canvas, becomes an expressive repetition, where it is necessary to render apparent the respect and uniformity of the monastic rule, the silence, meditation, renunciation of the cloister.

If it is necessary to represent a terrible idea, — for instance, that of the last judgment; if one wishes to recall the memory of a violent action, like the rape of the Sabines or Pyrrhus saved, such subjects demand lines vehement, impetuous, and moving. Michael An-

gelo covers the wall of the Sistine Chapel with contrasting and flamboyant lines. Poussin torments and twists his in the pictures of "Pyrrhus Saved" and the "Sabines," and the linear modes employed by these masters are examples of the law to be followed, that of bringing back with decision to their dominant character the whole of the great lines, that is to say, the first means of expression, arrangement.

Those were very futile and false ideas which prevailed in the schools of painting from the end of the sixteenth century, thanks to the imitators, without genius, of the genius of Michael Angelo. According to their notions there should always and everywhere be contrast; the lines, the angles, the groups, the movements, the attitudes, the limbs, all ought to combat, contradict each other, for the sake of a brilliant variety, whose effect, while amusing the eye by oppositions, was to corrupt the eternal principle of unity. Monstrous abuse! Even the impetuous Diderot was shocked at it, and saw in this ill-understood and continual contrast "one of the most fatal causes of mannerism."

There was a time when the pyramidal arrangement was set up as a principle by the rhetors of art, and it was insisted upon for the groups as well as for the entire picture. There is nothing more dangerous than this pretended principle, for the pyramid contains two contrary elements, the horizontal and the perpendicular. But, from the moment that these lines have a language that appeals to the sentiment, a

moral signification, it is not fitting to leave the look uncertain between these two directions; the one must dominate the other so that the horizontal shall govern if the pyramid is very obtuse, and the vertical if it is very acute. In the "Piece of a Hundred Florins," a celebrated print of Rembrandt, in which Jesus Christ is represented healing the sick, the composition is developed decidedly in width, and the horizontal direction triumphs over the pyramid formed by the figure of Christ with the groups of sick that implore help.

The "Transfiguration" of Raphael, so often criticised as containing two pictures in one frame, betrays a second time this faulty arrangement, which is made still more apparent, by opposing to the pyramidal mass of the upper group the horizontal mass formed by the possessed of the devil and the apostles. It is evident that the want of unity, which for once escaped the notice of the great master, becomes more striking by the unfortunate choice of two contrary arrangements, which add optical duality to moral duality.

Suppose, however, the painter wishes to represent an Assumption of the Virgin, an Ascension of Jesus Christ, the transport of a saint, an apotheosis, or any other subject that naturally demands the pyramidal disposition, the unity would not be lost, if the whole of the composition, drawn as a lengthened oval, should be finished in the lower portion as a reversed pyramid. Raphael, who in spite of the instances quoted, is the master *par excellence*, in arrangement, has thus com-

posed the "Sistine Madonna," by opposing to the pyramidal lines of the heavenly apparition the very narrow base formed by the two cherubs grouped in the middle of the lower plinth which forms the support of an open window upon the balcony.

Whether one considers the optical beauty of the arrangement, or regards it as the rough draught of the expression, unity is the one principle, the true secret. As Montabert has judiciously written (*Traité complet de Peinture*), we must not say to the painter: "Compose pyramidally, stuff up the holes, do not leave gaps, avoid angles and parallels, seek contrasts;" we should say: "Compose according to your feeling, but whatever your combinations, bring back the lines, the groups, the masses, the directions, the dimensions to the unity you may have chosen, and have felt."

By unity, the artist can make all methods of arranging a picture successful: the convex that pleased Rubens and Correggio, which brings the principal figures into relief; the concave, employed by Raphael in the "Disputa," which is another way of concentrating the looks; the diagonal, as in the "Descent from the Cross" of Rubens, which arrests the attention by an unforeseen obliquity; and the strange distributions of Rembrandt, which, dictated by the emotion of genius, seem to address themselves only to the eye of the soul.

That the forms of the border ought to be indicated by the dominant line of the picture, is a truth often misunderstood and nevertheless so apparent that it

seems superfluous to insist upon it. A couchant Cleopatra, a sleeping Ariadne, forming a horizontal, would be badly placed in an upright frame. At Versailles there are piers, very long vertically, filled with military subjects whose horizontality is in shocking contradiction to the form of the panel. Everybody knows, from the print of Pradier, the beautiful composition of Ingres, "Virgil reading the Æneid." The painter intended to represent it horizontally, but when it occurred to him to put in the background the statue of Marcellus, lifting itself before the eyes of Livy, as the spectre of remorse evoked by the verse, "Tu Marcellus eris," the whole idea of the composition was changed, and the height became dominant, that the proportions of the picture might conform to the new direction taken by the thought of the painter, indicated by the poetic apparition of this phantom of marble, vaguely repeated by its shadow on the wall of the palace of Cæsar.

VIII.

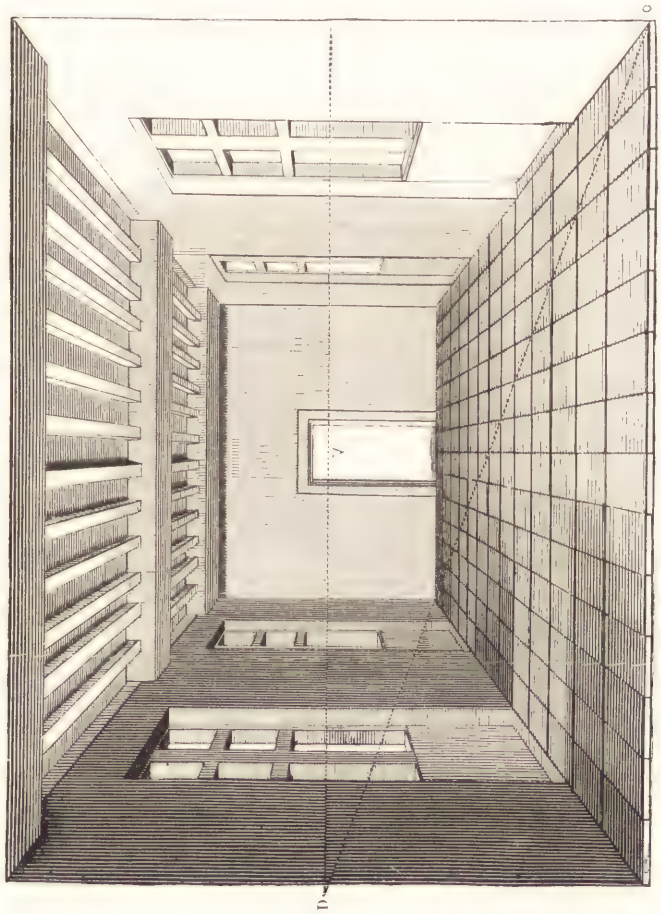
ALTHOUGH THE PAINTER WHO COMPOSES HIS PICTURE OUGHT CERTAINLY TO BE ACQUAINTED WITH THE LAWS OF PERSPECTIVE AND SUBMIT TO THEM, THE OBSERVANCE OF THESE LAWS ALLOWS SUFFICIENT PLAY OF SENTIMENT.

THE painter having to hollow fictitious depths upon a smooth surface, and to give to these depths the same appearance they would have in nature, must of necessity know the laws of perspective, that is, the science of apparent lines and colors.

In accordance with the manner in which the eye is formed, the height and size of all objects diminish in proportion to the distance whence they are seen, and all lines parallel to the visual ray seem to converge towards the point of the horizon to which the looks are directed. Some are lowered, others elevated, and all unite together at the point upon a level with the eye, which is called the *point of sight.* Again, in proportion to the distance of objects from us, the contour becomes less marked, the form more vague, and the color paler, less decided. What was angular becomes rounded, what was brilliant loses color, the layers of air interposed between the things

looked at and the eye that sees them, are like a veil that renders them confused, and if the atmosphere is thick and loaded with vapor, the confusion increases and the spectacle is lost. These two phenomena — the convergence of sloping lines and the gradation of colors — have given rise to the distinction of two kinds of perspective, in painting, *linear* and *aerial*. The latter is imposed upon the painter only when he finishes his picture; when he puts in, with the colors, the lights and shadows; we shall speak of it when we come to consider chiaro 'scuro, coloring and touch. The artist, at the moment in which he arranges his picture, that is to say, at the moment in which he assigns to each figure and to each object the place it is to occupy, takes into account only linear perspective. Now what is a picture, properly so called, in painting? It is the representation of a scene of which the whole can be embraced at one glance. Man having but one soul, his two eyes give him but one view. Unity, then, is essential to every spectacle that addresses itself to the soul. If the wish be simply to amuse by optical artifices and to excite the curiosity of the spectator by procuring for him, in a series of varied scenes, the pleasures of a momentary and material illusion, unity is no longer necessary, because the artist, instead of conceiving a picture, is arranging the machinery of a panorama. On the contrary, as soon as the painter wishes to express a thought or awake a sentiment, it is indispensable that the action should

be one, that is to say, that all parts of the picture should concur in one dominant action. But unity of action is inseparable from unity of place, and unity



V. Point of Sight. D. Point of Distance.
The lines perpendicular to the picture meet at the point of sight. All the horizontal lines (O D) forming an angle of 45° meet at the point of distance, D.

of place involves unity of the visual point, without which the spectator, drawn in different directions, would be as if transported to several places at the same time. It seems, then, that unity is more neces-

sary in a poem of images and colors than in a written poem or tragedy, because in painting the place is immovable, the time indivisible, and the action instantaneous.

That determined, how shall the artist submit to the unity of one point of sight the scene that his imagination has invented, or that it evokes by memory? Experience teaches us that our eyes can take in an object at one look only at a distance equal to about three times the greatest dimension of the object. For instance, to see at one glance a stick a yard long, we must, if endowed with ordinary sight, place ourselves at a distance of three yards. Suppose the painter looks at a landscape from the window of his room, the objects presented to his view will be so numerous and will occupy so vast an extent that he will be obliged to turn his head and run his eye over the landscape to see, one after another, the different points. If he retires into the chamber the extent will diminish, and if the window be a yard wide and he withdraws to a distance of three yards, this distance will furnish the measure of the space he can take in at one look. The window will form the frame of his picture; and if we suppose that instead of canvas or paper, it is a single square of glass that fills the aperture, and that the artist with a long pencil could sketch upon the glass the contour of the objects as they present themselves, his sketch would be the exact representation of the landscape which

will be drawn according to the rules of perspective, since the perspective will draw itself.

Hence, a draughtsman with a trained, a correct eye, could put in perspective all that he draws, without the aid of geometrical operations; but for this it would be necessary that the picture he traces should be always beautiful enough and sufficiently conformed to his idea to remain invariable; for if the artist wishes to displace a line, to change a figure, to efface a rock or a tree, to add a building, or simply to put at a distance what was near, and to draw near what was far off, the correctness of his eye will no longer suffice: the perspective no longer drawing itself upon the glass transformed into a canvas, the painter must have recourse to the laws that observation has discovered and geometry formulated.

These laws of perspective are simple, and are interesting and admirable from their very simplicity. They were known to the ancients, and in the fifth century before our era, the Athenians who heard the tragedies of Æschylus could admire upon the stage a fictitious architecture designed by Agatharcus. Two pupils of this artist-geometrician, Democritus and Anaxagoras, published the theory of perspective, and later, Pamphylus publicly taught it at Sicyon. At the epoch of the Renaissance, perspective was rediscovered or reinvented by the Italian masters that flourished in the fifteenth century, — Brunelleschi, Masaccio, Paolo Uccello, and Piero della Francesca. The last wrote a treatise upon it. Uccello found

such delight in it that he devoted his life to it, studying day and night, saying to his wife, who remonstrated at his depriving himself of sleep, "Oh! what a charming thing perspective is." "*Oh! che dolce cosa è questa prospettiva.*" In our day the illustrious geometrician, Monge, upon the foundation of descriptive geometry, of which he had made a body of science, furnished a rigorous demonstration of perspective when the books of Albert Dürer, of Jean Cousin, Peruzzi, Serlio, Vignole, Dubreuil, and Desargues, contained little more than affirmed results. Now, perspective, clearly explained in the "Elements" of Valenciennes, animated with spirit in the different works of Adhémar, considered by M. de La Gournerie in its effects and in its relations to theatrical painting and decoration, simplified in the new Theory of Sutter, perspective, we say, can be easily and thoroughly learned.

In studying these authors the artist will learn that — the picture being generally considered as a plane placed vertically — he ought to preface the operations of perspective by establishing three lines. The first is the fundamental or *ground line* which forms the base of the picture, the second is the *horizon line*, which is always on a level with the eye, and determines the position, as above or below, of the objects looked at, the third is a vertical line that cuts the first two at right angles, and which, ordinarily, divides the picture into two equal parts.

The point at which the visual ray perpendicular to

the picture meets it, is called in perspective the *point of sight.* It is found at the extremity of the ray which passes from the eye of the spectator to the horizon, and as the horizon rises in proportion to the elevation of the eye, and descends as the eye is lowered, the visual ray terminates at the horizon, whatever its elevation upon the vertical line. The point of sight and the horizon line being determined upon the picture, measure the distance at which the spectator should place himself, to see the picture as the painter saw it; in other words, measure the length of the visual ray. This ray, being perpendicular to the eye, is, so far as the eye is concerned, but a single point. To see its true size, we suppose it lowered upon the prolonged horizon line, and the point where this lowered line ends is called the *point of distance*, which ought to be as far from the point of sight as the spectator is distant from the picture. These are the two points and the three lines that serve to construct all good perspective. He must also take account of the numerous exceptions certain objects may present, which have no regular relation to the picture — as, for instance, a chair overthrown by chance in a room — and whose horizontal lines will terminate at an *accidental point* placed upon the horizon. If we suppose the chair tipped over upon another, in such a way as to rest upon the floor or to have its four legs in the air, the accidental point would be above or below the horizon.

To resume, the masters of perspective will teach the artist: —

That all the lines perpendicular to the picture converge at the point of sight;

That all the lines parallel to the base of the picture have their apparent perspective parallel to this base;

That all the horizontal lines forming with the picture an angle of 45 degrees, converge at the point of distance;

That all the horizontal lines parallel with each other, but not with the picture, converge at the same point upon the horizon line;

That all the parallel oblique lines converge at a point that may be above or below the horizon, within or without the picture, according to the situation of the lines;

That all the objects diminish in every way, in proportion to their distance from the observer.

Thus, the point of sight being placed in the centre of the composition forms there a star, whose rays are the sloping lines perpendicular to the picture, and as some descend to the horizon and others ascend to it, the horizon line divides the picture into two fans, opened in opposite directions, and cut by the four sides of the frame and by the lines parallel to its sides.

Remarkable union! the sight of our eye resembles perfectly the sight of our reason, and optics is in nature what it is in philosophy. The difference in the point of sight changes the moral perspective of ideas as well as the linear perspective of things, and ac-

cording to the point of distance at which our mind is placed, it seizes only details the prominence of which



The horizontal lines parallel to each other, but not to the picture, meet at the same accidental point. (G. G. G.) upon the horizon line. If the parallels were not horizontal, the point of meeting would be above or below the horizon.

deceives or embraces the whole whose grandeur enlightens it. Moreover, physical perspective, however rigorously the rule and compass of the geometrician

may be applied, rests submissively under the empire of sentiment. Louis David used to say to his pupils: "Other painters know the laws of perspective better than I, but they don't feel them so well." This signifies clearly enough that knowledge alone does not suffice to the artist when he traces the perspective of his picture; sentiment also should find its place in it. We shall see, indeed, that sentiment ought to direct, one by one, all the operations of the painter; determine the height of the horizon, the choice of the visual point, the point of distance, and the size of the optical angle.

The elevation of the horizon. Although the line of the horizon is curved, owing to the spherical form of the earth, this curvature is so microscopic and inappreciable that it may be replaced by a straight line. But at what elevation should the horizon be drawn? If one wishes to paint a sea view, the horizon will naturally be the line that separates the sea from the sky, for the horizon is only the level of the sea that we should perceive if the land and the mountains that conceal it were transparent. Taste teaches that the elevation of the horizon in the picture should depend upon the subject the painter has chosen and the number of figures he wishes to place upon the canvas.

If he desires to represent a public *fête*, like the "Kermesse," of Rubens, or a magnificent festival, like the "Marriage at Cana," of Paul Veronese, it is evident he must elevate the horizon to show as large

a number of persons as possible, and to unfold the scene to the eye of the spectator as he would see it if he were placed upon a terrace or behind a window, which, for him, would be the frame of the picture.

David, wishing to paint the "Serment du jeu de Paume," imagined himself standing upon a table, whence he could see all the groups and all the movements of the assembly. Gros, to bring out the dark battle-field of Eylau, has placed the horizon level with an eminence, whence he could have taken in, in its whole extent, the entire spectacle of this great disaster. "When the picture," says Adhémar ("Supplement to the Treatise upon Perspective"), "represents a room in which are several persons, some seated, others standing, the horizon should be on a level with a person standing. In this case, the spectator will have the same impression as if he were standing near those represented in the picture. If the subject contains only two or three persons seated, one will do well to place the horizon on a level with their eyes. After some moments' attention, the spectator might believe he is himself seated beside them, and taking part in their conversation. But if one of them should appear to raise the head a little, as if he were looking at some one standing, it would be necessary, as in the preceding example, to place the horizon on a level with the person standing."

Let us suppose, now, that the artist has to compose a picture for a fixed place, or a wall painting at

a determined height; the horizon line will be chosen in conformity therewith, but with a certain management, or at need, with certain *tricks* favorable to the view. The celebrated painter, Mantegna, having a commission from the Marquis of Gonzaga to paint the "Triumph of Julius Cæsar," which was to adorn the palace of Mantua, and to be placed higher than the eye of the spectator, took care to place the first figures upon the ground line forming the base of the picture, then the feet and legs of the persons in the middle distance gradually disappeared in accordance with the given line of the horizon and geometric laws. The litters, the vases, the eagles, and the trophies borne in triumph, he drew so that the eye perceived only the bottom. Vasari praises highly this scrupulous observance of the laws of perspective. But should truth be carried so far as to astonish the eye by showing it singularities that confound it? It may happen that the eye is justly offended by the very precautions one takes not to offend it, and that the spectator, not taking into account the horizon line that the painter has chosen, finds *bizarre* what is, nevertheless, justified by geometric science. The essential thing in painting is to move or captivate the soul, even at the expense of the rigorous laws of scenography, or at least by a slight infraction of these laws.

The point of sight. The point of sight is always upon the line of the horizon, but upon what point of this line should it be placed? In the middle

of the picture? To right or left, more or less near the frame? Here also the artist takes counsel of the sentiment. The great masters in their most famous compositions,— Leonardo da Vinci in the "Last Supper," Raphael in the "Disputa," the "Heliodorus" and the "School of Athens," Poussin in the "Judgment of Solomon," Lesueur in the "St. Paul at Ephesus," — have fixed their point of sight either at the centre of the picture, — that is at the intersection of the diagonals, — or at equal distance from the lateral lines of the frame. There results a symmetry which has something grave, calm, majestic; that is perfectly in keeping with religious subjects and the imposing scenes of history. The optical equilibrium produced by the equality of the masses that correspond to each other, produces in the mind a sort of moral equilibrium. Wherever the architecture furnishes a perspective clearly defined, the point of sight placed in the middle of the scene calls the attention of the spectator at first to it, afterwards recalls it to the same point. If, for instance, Jesus Christ is seated in the centre of the picture in the Last Supper, the lines that converge at the point of sight constantly bring back the visual ray to the dominant figure, to the knot of the drama, where emotion is concentrated, where, ceaselessly, the eyes of the mind turn. Solomon, seated on the throne from which he is to render judgment, seems to me still more justly placed, in a composition whose rigorous balancing seems an allusion to the sovereign impartiality of the judge who occupies the

centre of it. And if we would borrow from contemporaneous art an illustrious example, we shall see the author of the "Apotheosis of Homer" add to the solemnity of his arrangement an august equilibrium, by choosing the point of sight, indicated by symmetry, to place in it the venerable figure of the poet between the "Iliad" and the "Odyssey," in the very axis of the temple where he is to be deified, and which serves as a background to the spectacle of his coronation.

There are excellent painters who have often placed the point of sight at the side of the picture, not far from the edge. Lesueur himself, in the twenty-two admirable compositions that form the "Life of St. Bruno," has almost invariably supposed the spectator to be at the right or left of the middle line. Sometimes his point of sight is fixed upon one of the lateral lines of the frame, so that one composition seems to be the half of another; for instance, that which represents St. Bruno distributing his goods to the poor. One might believe that these quiet images of the life of the cloister, these scenes of melancholy austerity, would gain by presenting more perspective equilibrium, less inequality in the masses separated by the point of sight. But it is proper to observe that, compositions forming a single history, a single whole, may complete themselves to the look in such a way that one picture may balance that which precedes or that which follows. One might say also that Lesueur, in throwing the point of sight to the

corner of the picture, has wished to express the distance of the profane eye, and to raise only a corner of the veil that conceals from the cenobites the things of the world.

Raphael, in the most animated scenes, keeps the central position of the point of sight; thus he puts the movement of the figures in opposition to the immobility of the architecture. In painting his sublime fresco of "Heliodorus," in which we see the sacrilegious robber overthrown by a miraculous horseman, and whipped with rods by two angels that cleave the air with rapid flight, Raphael doubtless thought of the contrast the quietude of a symmetrical architecture would produce, with the impetuous movements of the celestial cavalier who rides down Heliodorus and the angels that strike him with rods; while the high-priest, Onias, in the depths of the sanctuary, where all the sloping lines of the perspective converge, is still asking of Jehovah the miracle already accomplished, overwhelming and swift as lightning.

The equilibrium produced by placing the point of sight in the middle of the horizon line, may serve, sometimes, to strengthen the picture if it is calm, sometimes to heighten the movement if it is dramatic. But the example of Raphael suggests to us another observation; it is that in mural painting the real architecture dominates the fictitious, and it would be shocking to place upon a wall a perspective which would suppose the spectator at an impos-

sible place, and which would be falsified by the surrounding construction.

The rôle of sentiment is so great in painting, even when geometry dominates, that a certain great painter has allowed himself *two horizon lines* in one picture, and we pardon this license. Paul Veronese, in the "Marriage at Cana," considers the horizon line, not as a line without breadth, but as a zone which allows two points of convergence, the one above the other. Veronese did this for two reasons: first, because the lofty architecture of the picture would have presented lines sloping too much, whose direction towards a single point would have been too precipitate and without grace; then, because before a picture so large, filled with episodes and without rigorous unity, since he could only express the general joy and the pleasing disorder of a feast, at which Jesus himself plays merely the rôle of a guest, the spectator is to be interested successively by the different groups, and to walk before the picture rather than to fix his eye upon the point of sight.

The point of distance, that which marks the distance of the spectator from the picture, is also under the empire of sentiment. Balthazar Peruzzi and Raphael, according to Lomazzo ("Trattato della Pittura"), thought "that the artist who wishes to paint the façade of a house in a narrow street, is not obliged to represent objects according to their distance from the opposite wall, but he ought to draw them according to an imaginary distance, supposed

greater, and which would be equal to three times the height of the façade, else the figures painted would seem to stumble and fall backward (*trabbocare e cadersi addosso*).

At present it is a fixed rule for designers who have to put in perspective the interior of a chamber or gallery, to draw it, not as they see it, but as they would see it if they could withdraw to a distance that supposes the overthrow of the wall against which they lean. Although this distance is arbitrary, it must in all cases be so great that the spectator may take in the whole of the picture at one glance, without moving the head, else the objects near the frame would undergo those monstrous changes that in perspective are called *anamorphoses*. A column, for instance, showing its base when seen from above, and its capital seen from below, would be an architectural member unrecognizable by the abrupt diminution of the capital, which would seem to fall inwards, and of the base, which would apparently fall outwards. Every one has remarked the angular deformity presented by the photographs of the Bourse at Paris. To avoid such deformities and have an agreeable view of the building, the photographer would be obliged to retire to a distance rendered impossible by the surrounding buildings. This withdrawal the painter secures fictitiously by the methods of perspective, which allow him to rectify what he sees by drawing it as he would see it at a suitable distance. The photographer who wishes to

have a faithful portrait, without diminution of the extremities, must, according to MM. Babinet and de la Gournerie, place his instrument ten metres from the model. Mathematical truth is not of the same nature as picturesque truth. So it constantly happens that the geometrician says one thing and our mind another. If I see a man five feet off, his apparent diameter is double what it would be if I saw him at a distance of ten feet; science affirms it, and does not deceive; nevertheless, this man will always appear to me of the same size, and the error of my mind will be as infallible as the truth of the geometrician. That is a mystery that mathematics cannot explain, as Voltaire observes in the "Philosophy of Newton." "Whatever supposition one makes," says he, "the angle at which I see a man at the distance of five feet, is always double the angle at which I see him at ten, and neither geometry nor physics can resolve the problem." We need, in truth, something besides physics and geometry to explain how the testimony of our eyes is contradicted by a decree of sentiment, and how an incontestable truth may be overcome by an irresistible falsehood.

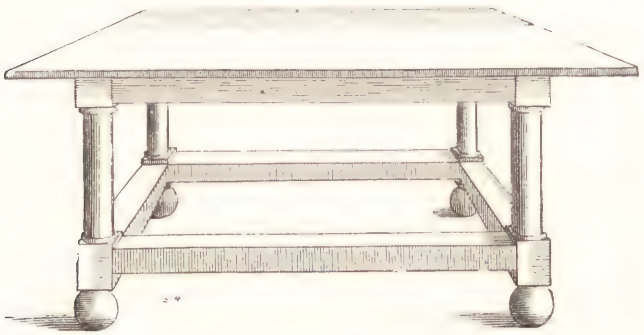
The optical angle. The angle of which Voltaire here speaks, is the optical angle. This is formed by two visual rays which pass from the centre of the eye to the extremities of the object seen. The opening of the optical angle depends upon the distance of the spectator from the picture, for the nearer an object is to the eye, the wider the eye opens to

see it. But this angle cannot be greater than a right angle; in other words, the greatest space that the eye can take in is included in a quarter of the circumference. In painting, every representation ought to be seen at a single optical angle, or, as said Leonardo da Vinci, "from a single window" ("*la pittura deve esser vista da una sola finestra*"). Through this window of the eye the mind can embrace but one picture at a time. But the visual rays that transmit it are of very unequal strength. The only powerful ray is that which is perpendicular to the retina; all the others grow feeble in proportion to their distance from this normal ray, so that the more the angle is opened by the nearness of the spectator, the more weak rays it contains; the more the angle is lessened by the distance of the object, the more powerful rays it contains. Thus, short-sighted persons partially close the eyes to concentrate their vision by drawing the extreme rays, which are weak, nearer to the normal ray, which is the only strong one.

But while the oblique rays become feebler, the objects are lessened by distance, the color fades out, sharpness of contour is lost. Thus man can see in their true size, that is *geometrically*, only the things that are perpendicular to his retina, and at a certain distance; for the geometrical image of an object is that seen in its real dimensions by an eye as large as it; everything greater than the eye is seen *in perspective*, that is, in its apparent dimensions.

Strange and beneficent illusion, which testifies at the same time to our littleness and our grandeur!

Only the eye of God can see the universe geometrically; man, in his infirmity, seizes only foreshortenings.



Yet as if all nature were subject to him he runs his intelligent eye over it, and each of his movements changing his point of sight, the lines come of themselves to converge there and form for him a spectacle always changing, always new. Perspective is, so to say, the ideal of visible things, and it is not surprising that the old Italian master vaunted its charms. But this ideal, like the other, ceaselessly flies and escapes us. Always within reach of the eye, we can never seize it. As man advances towards his horizon, his horizon retreats from him, and the lines that seem to unite in the remote distance, remain eternally separate in their eternal convergence. Man bears within himself, as it were, a mobile poetry that obeys the will of his movements, and that seems to have been given him to veil the nakedness of the true, to correct the rigor of the absolute, and to soften in his eyes the inexorable laws of the divine geometry.

IX.

COLORING HIS SKETCH OR LIMITING HIMSELF TO OUTLINE IN HIS COMPOSITION, THE PAINTER ATTAINS EXPRESSION ONLY IN DEFINING IT BY THE DRAWING, THE ATTITUDE, THE GESTURE, OR THE MOVEMENT OF EACH FIGURE.

COMPOSITION is not improvised. The excited painter may, in a moment of inspiration, see a composition before the eyes of his thought, but he must study it, prove its verisimilitude, submit it to the decision of his judgment.

"What! improvise!" wrote Eugene Delacroix; "sketch and finish at the same time, satisfy the imagination and the judgment at one stroke, in the same breath! That would be speaking the language of the gods with one's every-day tongue. Would one know what resources talent has for concealing its efforts? Who can say what an admirable passage may have cost? At the most, what one might call improvisation would be rapid execution without retouching or changing; but without the sketch wisely studied, in view of complete finishing, this sleight-of-hand would be impossible, even to an artist like Tintoretto, who is called the most impassioned of painters,

or to Rubens himself. With Rubens especially, this supreme labor, those last touches that complete the thought of the artist, are not, as from their strength and firmness one might believe, the labor that has excited to the highest pitch the creative force of the painter. It is in *the conception of the whole*, from the first lineaments of the picture; it is in the arrangement of the parts, that the most powerful of his faculties is exercised; it is there he has truly labored."

Thus speaks an artist who had the fever of his art, who was impassioned often even to delirium. Like the orator who heard the murmurs of the people in the dash of the waves, the painter must create his picture, thinking of the spectators present or future who will judge it; he must prepare himself *to speak the language of the gods.*

But how shall the artist test his composition? Ought he at first to try colors, and, necessarily, light and shadow, or shall he sketch the expression of his thought by lines alone? Very great masters — Michael Angelo, Raphael, Andrea del Sarto, Julio Romano — have drawn their sketches as if they planned a bas-relief. Before thinking of coloring, of lighting up their picture, they fixed the construction and the form of it. Nevertheless, if painting be inseparable from color and light, it seems as if the pencil and charcoal are not enough for the artist who composes; that it is important to represent to himself, palette in hand, the kind of effect that will aid the expression to be produced. Rembrandt no sooner conceived a

picture than, in thought, he lighted it up. Rubens foresaw the play of color, even in a sketch in which he only indicated the masses of light and shadow. Prud'hon also always invents in connection with light; as soon as he imagines his drama, he sees it by the light of the sun, or the rays of the moon, or the light of torches. How shall we decide between methods so different and geniuses so diverse? Must we condemn the great Italians for having given so decided a preference to drawing in the sketch of their works? No. These masters, *par excellence*, were above all things preoccupied with the moral element,—the expression. Color, which speaks to the senses rather than to the mind, seemed to them more external, hence, secondary. All composition was good to them, so soon as its lines were appropriately disposed, balanced, and arranged; they rendered it expressive by the character of the forms, the language of the drawing, the choice of the contour.

Let us imagine Michael Angelo tracing with the pen the composition of the "Last Judgment," of which the sketches have been preserved. With a sovereign will, a master-hand, he draws figures and groups whose movement and violence he foresees. There exist upon the paper, as yet, only some manly and rapid strokes, but already we seize the web of this great tragedy: we see a troop of threatening angels coming from the upper air bearing the instruments of the Passion, as if to crush humanity with them; we divine the Christ hurling down his thun-



SKETCH BY RAPHAEL FOR AN ENTOMBMENT.
(Borghese Gallery.)

derbolts; we perceive avalanches of the condemned cast into the abyss; we anticipate the terror that will fill all souls, even those of the martyrs who display the marks of their tortures, trembling lest they may not have deserved celestial pardon.

Through these pen-scratches appear astonished patriarchs, women filled with anguish, the Virgin, who seems frightened at having given birth to a God so terrible. The most hideous sins are rolled pell-mell together, the dead awake, hell yawns, and all this is expressed only by an entanglement of heroic lines; the groups unite, the composition grows complicated, the arrangement perfects itself; and all that the fresco will reveal is already foreseen in this sublime confusion. Without having recourse to the effects of color and light, the painter will attain his supreme aim, he will have *expressed* the sentiment of *inexpressible* terror.

Let us suppose now that a genius of the North, a Rembrandt, dreams of painting such a scene; he will take another road to reach the depths of our soul; this immense drama will begin to unravel itself by spots of color as if through clouds. In the infinite depth of the shadows we shall see nations emptying their tombs; the joy of the blessed will be indicated by the brilliancy of the coloring; terror will be expressed by dark tints rather than by distorted or violent forms. The souls uncertain of their fate will be enveloped in a mysterious half-light. The radiant heaven, the sombre earth, will mark the

contrast of eternal destinies, and hell will be enkindled at the fires of color.

Thus great painters, varying their methods according to their genius, may disconcert the philosophy of art, and constrain her to change, or at least to modify her laws.

Nevertheless, the art of the painter, having now passed through the entire cycle of its developments, can no longer neglect the effects of color and of chiaro 'scuro, so far as they are expressive. The age of painting is too far advanced to go back to the epochs in which its youth allowed it to perform prodigies, without at the same time employing all its resources. We may then regard as preferable the coloring of the sketch, above all when we wish to obtain the expression that results from color and light, an expression that harmonizes with nature, and is so important in landscape. But the great painters who make the woof of their work of human figures will none the less continue to seek expression by the attitude, the gesture, or the movement of these figures.

It is not with painting as with sculpture; the figures of the painter having neither thickness nor weight, being only pure appearances, may assume attitudes, make gestures that it would be impossible to execute in marble. Moderation of movement, sobriety of gesture, are the inherent laws of sculpture; they are demanded both by the solidity of the statue and its dignity, for it is not only because his figures are heavy, that an extravagant, *outré* gesture is forbidden to the

sculptor ; but because the divine forms of calm beauty suit beings whose image is to last for ages, and their movements, drawn not from beyond life, but from above it, ought to manifest a soul serene as that of the immortal gods, or of heroes that are to become such.

Less restricted in his flight, bolder and freer, the painter may represent attitudes that would be incompatible with the gravity of marble. He may hazard movements that reveal the fire of passion, gestures that betray the boiling of the blood in the heart. But here, still, the imitation of nature does not alone suffice to the painter more than to the sculptor; there must be *choice*, there must be *style*.

Listen to a passionate man; observe him; his words like his gestures will reveal in a striking and true manner the passion that animates him; but it may be that his angry words are an ignoble truth, and the excess of his gestures a repulsive one. It may be also, for want of sufficient vitality, he manifests imperfectly the emotions his feeble soul experiences. Hence, for the poet and the painter, the necessity of softening what nature has marked too strongly, or of accentuating with energy what she has expressed too feebly. The observation of natural pantomime is an excellent study, upon condition that the artist knows how, sometimes, to render it more significant, sometimes to spy out the moment in which it is energetic, without being mean.

But the gesture is not only individual, that is to

say, modified by temperament; it varies also in character according to customs and ideas, according to climate, and each nation stamps upon it the imprint of its own genius. What a difference between the reserve of an Englishman, and the grimacing mimicry of a Neapolitan? How, then, can we discover the principle of the gesture among such variations? Is it possible, among such slight differences, to unravel the generic accents? Yes. In spite of its variations, the gesture has its roots in the human heart, and it is possible to find them again there. Whatever may be, for instance, the different signs of veneration, it expresses itself, in all the countries of the world, by a tendency to bow the head and bend the body, as if to represent the inferiority of him who venerates in presence of him who is venerated. While the European of the North will indicate his respect by a cold inclination of the head, the man of Southern blood will bend himself double, and the Oriental, concealing his face, will prostrate himself to the earth. But all the degrees, marked or slight, will be included between these two extremes, and the artist will have a whole scale of differences from which to choose his pantomime.

If the gestures and the movements of man were all dictated by the organism, there would be more resemblance between them, because the arrangement of the human machine would produce them in a fixed manner, without other diversities than those of temperament, weak or energetic, generous or cold. But

there are movements, gestures, and attitudes, that have their source in the depths of the soul, and whose external manifestation is only a feeble echo, a symbol of that which agitates the world of imagina-



ATTITUDE OF PROPHET ISAIAH, BY MICHAEL ANGELO.
(Sistine Chapel.)

tion, that inner world in which pass the dreams of the sleeper and the reveries of the waking man. Gesture, like speech, has its metaphors. We reject an ill-sounding proposition almost as we would repulse a dangerous beast; we shrink from the recital of a

horror as we would from the reality of a frightful spectacle. The orator who is meditating his harangues, and who wishes to electrify his imaginary audience, needs to move, to keep step with his speech, as Rousseau did when along the highway he declaimed his impassioned prosopopœias. It is not by a cursory look at Nature that the artist will find the expression of those pantomimes which reveal the secret evolutions of thought. When Michael



ATTITUDE OF AHAZ, BY MICHAEL ANGELO.
(Sistine Chapel.)

Angelo, decorating the ceiling of the Sistine Chapel, wished to paint "Preoccupation," in the figure of Isaiah, it was in the depths of his own spirit he found the lines to express the attention of a thinker whom nothing can distract from his meditations. An angel calls Isaiah at the moment in which, having placed his hand in the book of the Law, to mark the place where he had ceased reading, the prophet

was following the course of his own thoughts. Scarcely moving his body, he slowly turns his head as if even an angel's voice could not snatch him from the abyss of reflection into which he is plunged.

The Prophets and Sibyls of Michael Angelo are the finest examples of the higher truth of gestures or attitudes of which Nature contains only the germ, and which it is the province of genius to discover, in order to create from it immortal types. The sublime figures of Jeremiah and Daniel, of Joel and Zechariah, the Erythræan, Cumæan, and Delphic Sibyls, are true creations of this kind. Without falsifying Nature, they are, nevertheless, supernatural. Each of their attributes, each of their movements, relates the drama of thought. The Sibyl of Delphi is the proud image of the intelligence that commands; the Cumæan seems absorbed by undecipherable enigmas. The Persian pores over a writing full of mystery that she seems to devour. She of Lybia, holding high her book and casting down a disdainful look, expresses contempt for the vulgar, to whom the sibylline books were forever interdicted.

And what ideal power in the figure of Jeremiah! The Prophet of the Lamentations is overwhelmed with the weight of his sad presentiments; his elbow upon his knee, he supports with one hand his bowed head, and closes the mouth ready to utter a groan, while he drops the other hand with unutterable melancholy. Even his coarse and neglected drapery adds to the expression by the simple, grand play, which

is, as it were, the gesture of the vestments. Would one paint, instead of the woes the prophet sees in the future, the woes that humanity suffers in the present, it is still in the frescoes of Michael Angelo he will seek an example of that grand style which, far from enfeebling attitude by generalizing it, renders it still more striking by imprinting upon it a typical signification. Never were consciousness of misfortune, excess of physical dejection, and moral lassitude expressed in a more memorable manner than in the attitude of Ahaz.

The point expression can attain in painting by means of gesture, we see and marvel at in the "Last Supper" of Leonardo da Vinci. There we recognize what *style* is, and how the observation of real life, after having germinated in the mind of a great painter, leads him to a higher truth. He was obliged to repeat eleven times the grievous surprise that the announcement of betrayal was to produce in faithful friends. He must paint astonishment, indignation, grief, tenderness, simple loyalty, unchangeable candor, all the sentiments, or rather all the variations of sentiment, that must necessarily be evoked among the Apostles by these words of Christ: "One of you shall betray me." Leonardo, with that penetration that led him to discover souls in the movements of the body, knew how to express the individual shades of feeling common to all the Apostles. One, astonished, is already threatening the traitor; another is cast down at the mere suggestion of such a crime;



GESTURES FROM THE LAST SUPPER. BY LEONARDO DA VINCI.

this one begins to exculpate himself, that seeks the culprit. Indignant honesty takes the form of contempt or vents itself in anger. The irritable Peter would avenge his master; John thinks only of dying with his God.

The gestures of the "Last Supper" have been analyzed with much feeling and sagacity by Stendhal: "St. James the Less passing his arm over the shoulder of St. Andrew, indicates to St. Peter that the traitor is beside him. St. Andrew looks at Judas with horror. St. Bartholomew, who is at the end of the table, has risen, the better to see the traitor. To the left of Christ, St. James protests his innocence by the gesture common to all nations — opening his arms and offering his defenceless breast. St. Thomas leaves his place, approaches Jesus, and, raising a finger of the right hand seems to say to the Saviour, "One of us?" This is one of the necessities which remind us that painting is a terrestrial art. This gesture was imperative to mark to the eye the moment, to make understood the words just spoken. St. Philip, the youngest of the Apostles, by a movement full of naïveté and frankness, rises to protest his fidelity. St. Matthew repeats the terrible words to St. Simon, who refuses to believe. St. Thaddeus, who has first repeated them to him, points to St. Matthew, who has heard them as well as himself. St. Simon, the last of the Apostles, to the right of the spectators seems to cry out, "How dare you tell us such a horrible thing?"

Let us pass now to another order of ideas; let us suppose the artist occupied in painting genre pictures, delineations of customs, scenes of manners, or village fêtes, as Callot delighted to represent them in his etchings, Teniers in his paintings; the genius of observation will suffice, because the comic does not exclude the ugly; on the contrary, and among popular and familiar gestures, the painter has only to choose the most impressive. Style would here be a perversion, for the value of the pantomime is precisely in the individual turn, in the strangeness of the incident. Generalized, the grotesque would be cold; it has no savor, but when it is individualized to the last point, seized by a photographic spirit, taken in the act. A bohemian of Callot, a peasant of Teniers, even an invalid of Charlet, are the more interesting the less they resemble others. But the originals are found only in Nature. We must have run through the fairs with Callot or haunted the Kermesses like Teniers, to paint, for instance, the gestures and movements of a player at bowls, when, having thrown his ball, he runs after it, follows it with his eye, encourages it with voice and hand, trembles at every stone that may hit it, and leads it to the end with a pantomime that hesitates between fear and triumph. See in one of the inimitable lithographs of Charlet, the "Call for the Contingent of the Commune," with what skill he characterizes the gait of the young soldier whom the discipline of the regiment has not yet fashioned. We distinguish in the band, at the

first glance, the skulker who is already ducking his head to let the bullets pass by, the mourner for *his dear Falaise*, the farm-boy advancing with resignation, and the scapegrace apprentice with love-lock on his forehead, his hat over one eye, who comes whistling and promising himself to get at once a bullet in his head or win his chevrons.

Thus, the rôle of Nature is the more important the lower art descends, the more familiar it grows. Naïveté is then the happiest gift; it is even precious in grave subjects where some features of common life are introduced. The picture of Lesueur, in which St. Bruno receives a letter from the Pope, shows us a charming example of naïveté in the embarrassed countenance of the rustic envoy, who, with hand on his cap, not knowing if it be admissible to remain covered during the reading, seeks to read the effect of the letter upon the countenance of the monk.

There is a great painter who has excelled in gesture — Rembrandt. He did not attain the beautiful, but he often touched the sublime. Drawing his inspiration from the heart, he was great because he was human, and he has thus touched the permanent and invariable in Nature. Under the costume of the Jews of Holland he has painted the men of all countries and all times. He understood perfectly that gesture is optical language, the language peculiar to painting, which ought to render the thought visible. When Rembrandt represents a drama of the Scriptures, "The Sacrifice of Abraham," for instance, with

what genius he renders the words from Genesis, "The Angel of the Lord called unto him out of heaven: Abraham! Abraham! lay not thine hand upon the lad." Translated in painting, the cry of the angel becomes a decisive gesture. The messenger of God, seizing with both hands the arms of the patriarch, shows us at the same moment the beginning and the end of the tragedy. And, since we are speaking of gestures and attitudes, how touching is the resignation of Isaac, who stretches out his neck with the confidence and gentleness of the lamb about to be slain. Before plunging the knife into the blood of his son, the old man covers his eyes with his hand to spare him, at least, the sight of death. All this pantomime is admirable, more pathetic even than the recital of the Bible, conforming to the letter of which so many other painters, even celebrated ones, have drawn an angel pointing coldly and vaguely to heaven.

The last word of art is to reconcile force of gesture with beauty of movement, warmth of truth with dignity of style. Here, Leonardo da Vinci and Raphael are inimitable. Raphael, especially, had the secret of intimating, by the mimicry of his figures, more than he shows. He knows how, by the movement, to indicate a part of the action that has preceded and a little of that which is to follow. What speaking truth in the figure of Elymas struck with blindness. The gesture seems simple, nevertheless it is studied. Nature furnished the motive, but style

has revised the expression of it: "And immediately there fell on him a mist and a darkness, and he went about seeking some to lead him by the hand." This



THE SACRIFICE OF ABRAHAM. BY REMBRANDT.

instant Raphael has seized in a way to show us the sudden and irresistible power of the Apostle. The sorcerer, deprived of sight, seeks a guide, not like

one born blind, but like a man who just now saw and suddenly has passed from light to night. To feel thoroughly this shade of difference, let us compare the Elymas of Raphael with the etching of Rembrandt, in which the aged Tobias so well represents the instinctive timidity and the gropings of the blind man, accustomed to the darkness, dragging his feet and tremblingly stretching out his hand.

Look, now, at the "School of Athens;" in it an attitude, a gesture, characterizes each of the philosophers of antiquity. The cynicism of Diogenes is manifested by the abandon of his posture; the obscure and discouraging doctrine of Heraclitus by his saddened countenance; the indifference of the Pyrrhonian by his quiet and ironical way of looking over his shoulder at the young aspirant who is eagerly writing the words he hears. The divine Plato points with his finger to the land of the ideal, the positive Aristotle seems, by his gesture, to moderate the enthusiasm of his master. Socrates, who, while reasoning, holds with his right hand the forefinger of his left, has the air of counting upon his fingers the deductions he draws, one by one, from his interlocutor, Alcibiades. In the group of pupils of Archimedes, we recognize by their different bearing the attentive disciple who follows the theorem of the geometrician; the scholar, more penetrating, who has outstripped the demonstration, and one who, wishing to explain it to a fourth, finds in him only a slow intelligence, marked by the vacuity of the countenance and the open hand that has been able to seize nothing.



ELYMAS STRUCK WITH BLINDNESS. BY RAPHAEL.

In the fifteenth chapter of his treatise, Leonardo da Vinci recommends the imitation of mutes in their pantomime, because mutes, for want of one sign, have learned the art of supplying it by all others; but the fear of not being understood drives them to excess of gesticulation, and might lead the painter to grimaces, or, at least, to strongly marked, overloaded mimicry. Pantomime is not only a means of making the intention of the figures understood, it is a means of representing them beautiful and interesting even in their passions. The principal figure of a picture ought rather to allow his soul to be seen than to display it. His gesture is not to demonstrate his passion but to betray it.

The painter of "Marcus Sextus" and "Clytemnestra," Pierre Guérin, went often to the theatre to study his art. Thence his poetically solemn but somewhat stilted manner. At first thought it would seem as if the study of the tragic scene ought to profit the painter, who aims at style, but it is not so. The pantomime of the actor, explained by speech, cannot be the same as that of the painter, which speaks only to the eyes. The spectator whom the preceding scenes have prepared, whom the declamation warms and fascinates, permits, in the hero of the stage, exaggerated movements, whose exaggeration he does not even see. It is with scenic gesture almost as with decoration; both address themselves to the masses, for whom it is fitting to heighten the colors and the action, because they do

not and cannot look closely enough to appreciate the delicacies and shadings that taste demands. On the contrary, having before him only a cool spectator, the painter could not make him accept anything factitious or exaggerated. It is then true, that it is not in the conventionalities of the theatre, but in the truth of passion and of life that he must seek his first inspiration. Why refer to the interpretations of poetry, instead of going back to the sources of poetry itself?

The actor and the painter have this in common — they study individual truth the nearer they draw to the comic. When Moliére writes the "Misanthrope" or "Tartufe," he generalizes, it is true, but he produces a comedy so high it touches the tragic. So the painter, in proportion as he elevates himself, abandons the small truth for the great one, remembering that painting, like the stage, has its sock and buskin.

The celebrated Garrick said one day to a comedian who was playing the rôle of a drunkard, "My friend, your head is really drunk, but your feet and legs are perfectly sober." That is equivalent to saying that unity in gesture is the law of the master and the secret of Nature. Gratiolet has very well said ("Conférences sur la physionomie,"): "The society of the organs of the living body is a perfect republic; all the organs groan at the suffering of one, all rejoice at the joy of one — and this contagion of sentiment, this concert of the organs, is marvellously ex-

pressed by the word sympathy." Nature, indeed, has localized our organs to perfect their solidarity. Sight, hearing, smell, taste, touch, divide the labor of life, and make the analysis of the sensations whose synthesis is in the soul. We cannot touch colors nor see perfumes; sound does not affect our eyes, nor light our taste, and the smell does not tell us if the rose is lighter than the pink; but the sensation, once received, is generalized, is felt through the whole organism. Look at the figure of Laocoön; it suffers from head to foot — it shudders even to the toes.

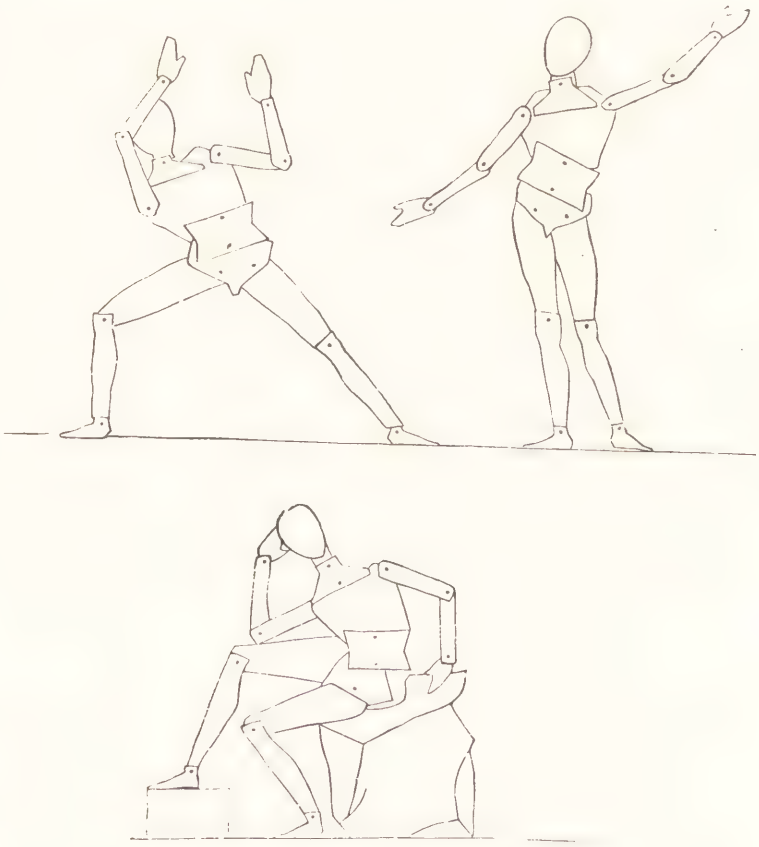
Descartes observes that the soul, which always has some influence over the muscles, has none over the blood; thus, pallor, or the sudden blush, do not depend upon the will. This admirable remark may be extended to certain gestures which are as involuntary as the movements of the blood, and escape the empire of the soul. The painter should take note of them, seize them in their rapid flight.

But models are not always under the eye of the painter; besides how fugitive are the movements that Nature offers us. How can one imitate them if he does not know their mechanical conditions, their wheel-work? The artists of antiquity, according to all appearance, in studying gestures made use of artificial skeletons, whose limbs were put together with screws. These jointed statuettes are described with precision in a satire of Petronius: "While we were drinking and admiring the magnificence of the repast, a slave brought a silver skeleton, made in such

a way that its joints and vertebræ could turn in every direction. After placing this skeleton several times upon the table, and giving it the different postures that the movable joints permitted, Trimalcion cried out: 'Poor creatures! See what we all are!'"

This passage of Petronius recalls to us the learned and judicious Paillot de Montabert. Become blind, he loved to talk of an art that had absorbed all his thoughts. One day, when we were talking of manikins, he begged me to read him a chapter of his "Traité de Peinture," in which he describes the jointed and moving figures that the ancient painters must have used, not only to compose expressive pantomimes, but to represent flying or falling figures for which no model could pose. It was in studying the monochrome figures upon Greek vases, that the profound theorist had dreamed of the manikins of cut cards, of which he has given a drawing in his book. We see, indeed, upon ancient pottery, bold and free gestures, movements sometimes exaggerated even to caricature, but always lively, resolute, speaking, which seem to have been invented by means of movable pieces. Is it not the imagination of the artist, rather than Nature, which has inspired the pantomimes of these astonishing silhouettes, and the expressiveness of these figures of priestesses, bacchantes, youths, and satyrs, that seem sometimes to be celebrating mysteries, sometimes executing sacred dances, or deliriously pursuing each other around the amphora? Moreover, is it possible that a model

by his attitude or his gesture, could faithfuly obey the thought, the dream of another? How, then, supply that which Nature does not furnish more surely than by these moving figures, which, presenting as it



MOVABLE FIGURES IN PIECES. PAILLOT DE MONTABERT.

were the algebra of the human body, are the more suitable to formulate its postures and movements, in the measure of the possible, and which, passing



under the hand of the painter, from the feeblest signification to the strongest, tell him the exact moment at which the gesture is energetic without being violent.

After all, whatever means the artist may have preferred, he must, if he wishes to become great, build upon real truth in order to elevate himself to a higher truth, so that that which in Nature was only language, in Art may become eloquence.

X.

WHEN THE COMPOSITION IS ONCE DECIDED UPON — WHEN THE GESTURES AND THE MOVEMENTS ARE FORESEEN, THE PAINTER REFERS TO THE MODEL TO GIVE VERISIMILITUDE TO HIS IDEAL, AND NATURALNESS TO THE FORMS THAT MUST EXPRESS IT.

NATURE is a poem, but a poem obscure, of unfathomable depth, and of a complexity that seems to us sublime disorder. All the germs of beauty are contained in it, but only the human mind can discover them, set them free, and create them a second time, by bringing them into order, proportion, and harmony, — that is to say, unity. Nature gives us all sounds, but man alone has invented music. She possesses all woods and marbles; man alone has drawn from them architecture. She unrolls before our eyes countries bristling with mountains and forests, bathed by rivers, cut by torrents; he alone has found in them the grace of gardens. Every day she gives birth to innumerable individuals and forms of endless variety; man, alone, capable of recognizing himself in this labyrinth, draws thence the elements of the ideal he has conceived, and in submitting these forms to the laws of unity, he, sculptor or painter, makes of it a work of art.

When the lines of his composition have been constructed, when the gestures and movements of his figures have been anticipated, the painter has *drawn* his picture, that is, has sought expression by the character of the drawing. He must choose, in the immense repertory of human forms, those best suited to translate his emotion or his thought.

What is drawing? Is it a pure imitation of form? If so, the most faithful of all drawings should be the best; then no copy would be preferable to the image fixed upon the daguerreotype plate, or traced mechanically, or drawn by the diagraph. But neither of these instruments gives us a drawing comparable to that which Leonardo da Vinci or Michael Angelo would have made. The most exact imitation, then, after all, is not the most faithful, and the machine in seizing the real does not always catch the true. Why? Because drawing is not a simple imitation, a copy corresponding mathematically to the original an inert reproduction, a pleonasm. Drawing is a work of the mind, as is indicated by the orthography of our fathers, who wrote it *dessein* — design. Every drawing is the expression of a thought or a sentiment, and is charged to show us something superior to the apparent truth, when that reveals no sentiment, no thought. But what is this superior truth? It is sometimes the character of the object drawn, sometimes the character of the designer, and in high art, is what we call style.

What do these words signify: the character of an

object? They signify the permanent side of its physiognomy, the dominant of the impressions it can produce. But the whole of the features that give to objects their character, the eye alone does not seize; it is the thought. It may be that these characters do not appear clearly on the surface; the painter then makes them apparent. It may be they are changed by some alloy; the painter then discriminates between inherent and foreign qualities. He unravels the primitive truth among the accidents that have corrupted it, he brings it back to harmony, unity. It is in this sense we must interpret a phrase that Taddeo Zuccaro attributes to Raphael: "We must paint Nature not as she is but as she should be.

See that rock; it is abrupt, sharp; nevertheless if we look at it closely, we shall notice, perhaps, smooth parts, fissures softened and rounded; but these exceptional features do not hinder the rock's being rough and savage, and to render it still more rough and savage the designer will neglect or attenuate, voluntarily or in spite of himself, such accidental forms, while he will amplify, if it is necessary, and insist upon the significant forms. Thus the drawing will have put in relief the character of the object drawn, and far superior to the work of a machine, it will be a work of art.

That the character of the forms should be, in the drawing, the dominant quality, greatly superior to mathematical exactness, is so true, that there is nothing more interesting than the sketch of a mas-

ter. I do not speak of those trifles in which the pencil only touches a half perceived image, because the artist is only, as Fénelon says, *humming* his thought. I speak of those abridged, rapid drawings, in which the painter, not having had leisure to be correct, has seized only the most striking aspect of the object and has thrown upon the paper a sentiment rather than an imitation, an impression rather than a copy. How many features are wanting or are but just indicated! How many details are omitted! Nevertheless this concentrated, condensed sketch has said everything if it has made us touch with the finger the character, veiled or prominent, that all the forms, even the inanimate ones present, and which is then, so to say, the spirit of things.

Again, in presence of the creations of Nature, the artist has the privilege of seeing in them what he himself carries in the depths of his soul, of tinting them with the colors of his imagination, of lending them the witchery of his genius. A woman in whom Correggio would find all the graces of voluptuousness, Michael Angelo would see chaste and haughty. A landscape that to Van de Velde would have a sweet and familiar aspect, would seem savage to Hobbema. Claude and Poussin have both painted the same fields, but the one discovered in them the poetry of Virgil, the other heard more manly accents, followed a severer muse. Thus, the temperament of the painter modifies the character of things, and even that of living figures; and Nature, for him, is

what he wills her to be. But this taking possession is the appanage of great hearts, of great artists, those whom we call *masters;* precisely because instead of being the slaves of reality they govern it; instead of obeying Nature, or rather by reason of having known how to obey her, they know how to command her. These have a *style;* those that imitate them have only a *manner.*

But aside from the style peculiar to every great master, there is something still superior and impersonal; it is *style.* What we mean by this word we have already said in the course of this work. It is truth aggrandized, simplified, freed from all insignificant details, restored to its original essence, its typical aspect. This style, *par excellence,* in which, instead of recognizing the soul of an artist, we feel the breath of the universal soul, has been realized in the Greek sculpture of the time of Pericles, and now we have to examine if it be realizable in painting. We have proven that drawing is not a mere imitation of form, a literal imitation. Not that at least, for a master.

For a master, I say, for we must distinguish between him who learns and him who knows, and turn our attention to the teaching of drawing.

The saying of Raphael, that we have quoted, "We must paint Nature not as she is but as she should be," is not addressed to pupils; it is perfectly intelligible only at the last degree of initiation; and I am sure, if it were spoken, it was only before such men as Julio

Romano, Perino del Vaga, or Polydorus. For a beginner nothing would be more misunderstood than to counsel the ideal and to say to him, "Correct Nature." The artist who is beginning ought to copy naïvely, religiously what he sees; but to copy Nature it is not enough to have eyes, he must know how to look, he must learn to see: and how shall he learn?

Several methods may be good. There is one, however, that Philosophy recommends; it is that which consists in passing from the simple to the complex, from the permanent to the accidental, from that which is to that which seems to be.

All bodies having three dimensions, length, breadth, and thickness, have a form. Yet there are those that, to the eye, have no thickness; these have only contour. A leaf of paper, for instance, has a configuration determined by its exterior lines. The figures whose fantastic silhouettes decorate Greek vases, offer no appearance of thickness; thus they are not human forms but only the shadows of them. That which we understand in painting by the word form, is an object that has salient and reëntering parts. Hence it is impossible to draw any form whatever without more or less of perspective; that is why Leonardo da Vinci saw in perspective, "the universal reason of drawing." But what is perspective? The science of apparent forms. To represent well objects as they appear, it is of consequence to know them as they are. One cannot see truly but with the eyes of the mind; and a form that one

should draw without comprehending it himself, he could not make comprehensible to others: the ignorant looks, the intelligent sees.

Then, before teaching perspective, which is the side continually accidental, it is useful to teach the geometrical, which is for everything its real and permanent manner of being; for the visual change of an object seen foreshortened, of a capital, for instance, is independent of the capital itself, which none the less preserves its positive proportions, its height, its breadth, its volume; in other terms, its geometric construction. What does the architect do before drawing a building? He traces at first the plan that measures the depth, then the profile that determines the height, afterwards the face that gives the breadth, and it is when it possesses all these measures that he draws the edifice geometrically, that is to say, as it is in reality; later he draws it in perspective, such as it will be in appearance; thus should the beginner proceed. Does he wish to give the idea of a pyramid with unequal faces? Let him decompose the superficies of it, let him know just what is the polygon that is the base of it; then let him draw the triangles of which each side of the plan will be the base: let him take account of the relations between them; when he shall know that the pyramid is only the assemblage of these surfaces, he will draw it intelligently.

If, on the contrary, the pupil is allowed to get in the habit of drawing objects by approximation, with-

out measure and rule, he will fare like a traveller who wished to learn English, and who, scarcely landed in Dover, hastened to repeat everything he heard. From speaking badly in the beginning he contracted the habit of it; he taught himself a bad pronunciation, which became incorrigible. If he had for a while kept silent, he would have accustomed his ear to the true pronunciation, which would have penetrated into his mind, his memory. But in order that it should penetrate there perfectly, it is essential that our traveller should have seen the language printed; that he should know how the words are written, of what consonants and vowels they are formed. That is, as it were, the geometry of the tongue, the change it undergoes in the mouth of the people is the perspective. So to pronounce a form well by drawing, we must first know how it is written in the vocabulary of Nature.

To be acquainted with forms before drawing them is a necessary condition for the beginner. He will not know how to pencil a head correctly if he does not know the divisions of it; still less a whole figure if he has not learned the proportions of the skeleton and its generic measures. And as all the lines are straight or curved, and geometry is the principle of all forms, it is by the elements of geometry that the teaching of drawing should commence.

The artist, in proceeding thus, will follow the path traced by him whom Plato calls the eternal geometrician. Long before life manifested itself by that

which is the highest expression of it, sentiment and thought, crystallization produced a mysteriously symmetrical geometry, the triangular or polyhedric forms that bodies take in passing from a liquid to a solid state; and the rigid lines of the prisms of minerals preceded the reign in which the elegance of vegetables, the curves of flowers displayed themselves, and that other reign, far higher, in which a new symmetry is announced, no longer rigorous, frozen, but broken by liberty of movement, animated by life, redeemed by grace, or replaced by equilibrium. The geometry that marked the beginning of this divine creation of which life was the coronation, ought also to occupy the first rank in that human creation — art, whose last word is beauty.

All the knowledge of the designer consisting in hollowing fictitious depths upon smooth surfaces, and in arranging distances, the child who shall have succeeded in putting a cube in perspective, and in representing the convexity of a sphere, will possess, in abridgment, the whole science of design, because he will know how to imitate the projecting and retreating, and manage all that gives to forms their modelling; that is, light, half light, shade, reflection, projected shadow. But a precaution is to be taken with the young pupil; one must not ask him to solve two problems at once, — to catch the form he must imitate, and at the same time to find out the manner by which he shall translate his imitation upon paper. To know how to *read* the model is not easy; to know

how to *write* what one has read, with the pencil or stump, is a second difficulty added to the first. Why should the pupil painfully invent proceedings that others have invented before him. It seems to us that the drawing of objects already drawn or engraved ought to precede drawing directly from a model, geometrical or not; and that before putting one's self face to face with reality, it is well to learn the conventional proceedings by which it is interpreted. For finally the contour that imprisons a figure is made up of lines agreed upon, necessary to fix the image upon a smooth surface. The fashion of expressing the shadows and indicating the degrees of distance by cuttings on the pencil or tints laid on with the stump, are equally agreed upon. It is useless to complicate the embarrassments of the beginner by making him study at the same time the art of seeing and the art of interpreting. As to placing the pupil at once in presence of the living model, it would precipitate him into a deluge of errors and prepare for him the bitterest discouragements, with as little prudence and reason as to ask an aspiring musician to decipher a symphony.

After geometry and perspective, the designer who feels in himself the high vocation of the painter will do well to learn the elements of architecture. Not long since an eminent sculptor, in a very remarkable lecture upon the teaching of drawing, said: "There are still in the field of creation exact notions and a sovereign art; for if, at the beginning of our studies

we find architecture the arsenal, as it were, of practical means, at the beginning of higher education we shall find it contains all the principles of composition. It gives a foundation and a frame to all works of art. It fixes picturesque ideas in stable lines; of necessity it fixes masses, movements, life, even sentiment, that it may present all in a representation that shall be animated without causing fear, lest it should tumble to pieces or fade away."

Is there a principle of correct drawing? Yes, and now we are to find ourselves with the great masters. They will teach us that art, like science, rests upon axioms so simple as, at first thought, to excite a smile. "The whole is more important than a part," is one of the truths that serves as a rule to the designer, as it is the starting point of the geometrician. When a model *poses* before us, we must study the whole, closing our eyes to details, till the general movement of the figure has been seized. Raphael makes us feel this predominance of synthesis even in the parts; that is, after taking the whole of the whole he takes the whole of each part. And this manner of seeing which seems so natural, so simple, we find in perfection only in the Greek sculptures of the golden age, and in the drawings of some of the great masters. Some illustrious artists have proceeded differently. Michael Angelo, for instance, who, instead of blending the parts into one whole, gives them an exaggerated relief, a strongly marked contour. Instead of enveloping the muscles, he de-

velops them; but Michael Angelo is a man whom we must admire without following, because his genius, absolutely inimitable, inevitably leads copyists astray. The true masters for the beginner are Leonardo da Vinci and Raphael: the first because, in



STUDY OF RAPHAEL FOR THE APOLLO OF PARNASSUS.

spite of his love of detail, he is great by reason of the repose and breadth of his shadows; the second, because he teaches grandeur without effort, and even in a feeble copy of his drawing there is grace and

charm, — so difficult is it to destroy the beauty of the original.

To enable us to understand better, let us suppose Albert Dürer drawing in the atelier of Raphael and with him, from the model that posed for the "Apollo of Parnassus." While the Roman artist, after having with a few strokes seized the movement of the model, looks at the broad surfaces and firmly indicates the principal insertions of the muscles, Albert Dürer devours with his eyes successively all parts of the figure; he analyzes it, copies it bit by bit. He sees a world in each morsel, and stops to contemplate it according to the degree of curiosity that it inspires in him. Coming to the hand, he discovers in it an infinity of details. He counts the veins and the folds of the skin, and the edges of flesh around the nails; meanwhile, he forgets the whole, or, as a German proverb says, *the trees prevent his seeing the forest;* so that if the figure stands well upon its feet, if the general movement is correct or seems to be, it will be through a miracle, or because the Teutonic genius with infinite patience will several times have corrected its work. From this search for detail there will result something unequal, disagreeable, and stiff in the drawing and in the entire figure; an individuality not consonant with grandeur and style. Finally, the model we have supposed posing before Raphael and Albert Dürer will remain, in the work of one, a peasant of the Campagna, while the painter of Urbino will only have to suppress some peculiar-

ities to ennoble his subject, and soon mounting to Parnassus, the fiddler of the Sabine hills will lead the choir of the Muses, as the god of Poesy.

But a question presents itself now which is perhaps the most delicate, most difficult, and important that we have to examine. Is style in painting of the same quality as in sculpture?

Sculpture, as we have already said, demands beauty above everything. It seeks, among the countless examples of human and animal life, those that represent a collective variety, a whole family of beings. Its mission is to fix types. It does not imitate the features of a certain strong and generous man; it sculptures the generous strength we call Hercules. It does not model the image of such or such a handsome young man; it models the accomplished gymnast, the elegant and supple, the robust and light-footed adolescent — Mercury, the embodiment of manly youth and grace. To the sculptor we may apply the verses of an unknown poet upon an ancient painter: —

> "En rassemblant ces traits, le sculpteur transporté,
> Ne forme aucune belle ; il forme la beauté,"

It is not precisely the same thing for the painter Doubtless he can sometimes lift himself to the majesty of symbolic art, and thus draw near to sculpture by the purity of forms, choice of attitude, and significance of drapery; but he runs the risk of having the apparent coldness of marble, without its

grand fullness, its imposing relief. There is, besides, in painting, an essential element which does not readily lend itself to emblematic expressions, — that is, color. Unless he keep to the severity of monochrome, and put unity in place of harmony, the artist using color will particularize what he wishes to generalize, and will contradict his own grandeur. Color can be an allusion to the idea only upon condition of being *one*. In its variety, charming or pathetic, gay or sombre, it expresses only the variable shades of sentiment or sensation.

The painter then is more closely bound to real life than the sculptor, that is to say, to movement and to change. He is nearer nature, his figures are characters rather than symbols, men than gods, and generally his mission is to represent them to us in the medium in which they move, in the atmosphere they breathe, interesting through chosen individuality, colored by light, framed in by the landscape, clothed in a costume that indicates their nationality, surrounded by circumstances that determine their action. The painter contents himself with being expressive where the sculptor would be beautiful; he so subordinates physical beauty to moral physiognomy that he does not even reject ugliness.

This conception of art distinguished the great Florentines of the fifteenth century, — Masaccio, Filippino Lippi, Donatello, and above all, Leonardo da Vinci. Persuaded that style in painting has its roots in the depths of nature, and that every human

figure holds a hidden fire from which a spark may burst under the eye of the artist, this great man sought out living caricatures and copied them with an inexorable fidelity, hoping to discover, in the excess of ugliness, the exaggeration of a character that he could afterwards bring back to human conditions, by suppressing the deformity, and preserving the expressiveness. When he was painting that sublime picture, the "Last Supper," he was daily seen going through the markets and faubourgs of Milan, to catch those grotesque or frightful visages which in his eyes denoted only a want of equilibrium between the conception and the birth, between the idea and the form, as if blind Nature, in the obscurity of a dream, had lost the measure of her creations and produced only nightmares. But these caricatures aided him to find the germ of a character. He purified, he polished the monster, till he had succeeded in seizing, in spite of the deviations produced by mysterious accidents, the germ of a physiognomy profoundly characteristic, and again made beautiful while remaining energetic. The admirable heads of the Apostles in the "Last Supper" have been thus disengaged from certain uglinesses observed in the lowest walks of life. In the hands of the artist, guided by such a master, a bit of coal becomes a diamond.

We are no longer in the age in which the painter, making of every figure an idea, as in ancient Egypt, suppressed individuals by giving them only the

physiognomy of their caste. Warriors, heroes, Pharaohs, gods, priests, slaves, all were there to indicate their species, not to assert their individuality. Each figure is an emblem, each slave represents thousands of slaves, each priest the entire class of priests, so that there is not a figure in this strange painting that is not multiplied to the eyes of the mind by all its similars, and which does not appear like a number. On the walls of the temple defile processions of ideas represented by phantoms always the same, always regulated by a sacerdotal rhythm. Individual varieties disappear under the uniformity of the symbol; all personality is effaced, and men are only the letters of a written enigma. Yes, we are far, very far from that solemn art in which the artist, commanded by religion, immolated Nature to the secret ideal of the sanctuary. Neither can we rejuvenate the painting of the Greeks, so similar, apparently, to their sculpture. Enfranchised henceforth from hieratic forms, we demand of our painters living children. We insist that they shall separate what antiquity confounded; that they shall put in relief personal characteristics, which the ancients disdained.

Study the model! who dare dispense with it when we know that Raphael restricted himself to it all his life. What a priceless lesson we have in his drawings from Nature. There is so much naïveté they seem the result of intuitive knowledge. We are in the atelier of the master. There is a girl of the people, a young woman from Trastevere, to

serve as a model for the "Holy Family," that became so famous, — the Virgin of Francis First, now in the Louvre. Dressed in a simple tunic, her hair negligently arranged, the young woman, the knee bent, the leg naked, bends forward as if to lift up a child that, as yet, exists only in the thought of the painter. In this attitude she poses under the eye of Raphael, who, desiring truth more than beauty, arrests the movement of the figure, assures himself of the proportions, seizes the play of the muscles, and verifies the grace of his thought. But he has only gone over a third of his road. The same woman will pose again, clothed and draped, except the left arm that will remain naked, and will afterwards be drawn by itself covered with a sleeve. What precautions, what scruples, what religious love of Art! At the age of thirty-five, and at the apogée of his genius, Raphael studies twice a figure for the Virgin, draws at first nude that which was to be enveloped in drapery, and afterwards the drapery that was to envelop the nude. But he knew them by heart, these Virgins with the child Jesus, who drew themselves under his facile pen, sketching a smile and from the first lines letting us divine their future grace. But it was necessary the painter should see them first upon earth, when they were simple girls of the people, who had not yet been visited by the angel and divinized by style. Thus when this transfigured model shall be a Madonna, when the child shall spring into the arms of his

mother, and seraphs shall come to throw flowers upon his cradle, the painting of Raphael will preserve something natural and secretly familiar that will render it more touching, because before being



STUDY OF RAPHAEL, FOR THE VIRGIN OF FRANCIS FIRST.

the picture of a divine family it was the image of a human family. We see now what the rôle of the draughtsman is. I mean one who is no longer a

pupil, who has become a master. The model must serve, not subjugate him. When a woman, a man,



THE VIRGIN OF FRANCIS FIRST. LOUVRE.

a graybeard, a child, poses before him, he has an idea, an aim. He wishes to express a drama, an action, a *poetry*, as the great Titian said (*vi mando*

la poesia di Venere). Let us suppose the heroine of his future picture, antique or modern, is a beloved Stratonice or a loving Marguerite, is it possible to imagine that the first comer will know how to take suitable attitudes, above all, that she will possess the enchanting beauty that explains the love of an Antiochus, or the naïve graces that justify the celebrity of the Germanic poem and the tenderness of all Germany for the beloved of Faust? That if the artist proposes to paint a blind Homer who, following his guide upon the highway, sings his immortal rhapsodies, it will suffice to copy the old beggar who just asked alms of him? Look at this drawing of Filippino Lippi, made from nature for a Saint Michael: how many things he will modify, how many ignore altogether, in order to transfigure this man picked up in the street into an archangel. It is clear that here the living model is only a necessary instruction, a reference. But if all the words of the language are in the dictionary, eloquence is only in the soul of the writer; and if all truths are in nature, it is that the painter may draw thence the elements of expression, not by composing his figures of bits and morsels, but by bringing them back to the unity of the character he has conceived, by insuring the triumph of the sentiment that animates him, imitating the musician who hastens or retards the time according to his own heart-beats.

Nothing is rarer than fine models, especially in France, where the mingling of races has effaced the

primordial accent of creation. The fresh beauty or the integrity of primitive characters is scarcely found except among people that have not mixed their blood with that of others, like the mountaineers



STUDY OF FILIPPINO LIPPI FOR A ST. MICHAEL.

of Savoy and Albania, the Circassians, Ethiopians, Negroes. One who has visited the ateliers of our painters knows how defective are the models. Ordinarily they are degenerate beings, without the least culture, who have been induced by poverty to exhibit

their hirsute or swollen forms, their pitiful gait, their unfortunate proportions void of unity. How many times, in the atelier of Paul Delaroche, have we seen models of men and women, selected for certain partial beauties, present nevertheless the grossest faults, huge excrescences, thin muscles, unwholesome flesh, vague and insignificant features.

It is noticeable that all the schools of the decadence have introduced into painting the commonplace features of the model, that is, those uglinesses that can neither be redeemed by character nor transfigured by sentiment. Pietro da Cartona, Giordano, Solimena, Vanloo, Restout, Natoire, Boucher, have reproduced and overloaded similar vulgarities. Hence those common heads, misshapen arms, deformed feet, which recall what we have seen in the streets or among the bathers at the sea-shore. The characters of Nature never reappear in their original purity, their striking unity. For them a Diana, a Juno, are courtesans with flabby flesh, whose nudity displays ugly folds, dimples that seem strangled in wadding, and if in their pictures we recognize the presence of Nature it is only by her errors, — her vagaries.

We may then say without paradox that nothing is farther from truth than such realism, for, instead of being natural, every deformity is contrary to Nature, since it is a falsification of eternal laws, and a corruption of divine exemplars. On the contrary, there are no figures in the world truer than the Ilissus

and the Theseus. Can we believe they were taken from life? Has Nature ever brought forth individuals as beautiful as those statues? Why, then, in their incomparable perfection, are they apparently so true a truth, — so naïve? It is because Phidias caught the spirit of creation, found again the essence of forms, and that nothing can be truer than the essence of truth. Great artists take Nature for their model, but they do not take a model for Nature.

XI.

AFTER HAVING VERIFIED THE FORMS HE HAS CHOSEN, THE ARTIST FINISHES, BY LIGHT AND COLOR, THE MORAL EXPRESSION AND THE OPTICAL BEAUTY OF HIS THOUGHT.

Now we reach painting properly so called, we enter its true domain. Till now the thought of the artist has remained, as it were, covered with a veil. We can imagine his composition, if it is but a sketch, like a bas-relief, which would hardly be visible in the darkness of the atelier. But let an open window admit the sunlight, and at once the relief transforms itself into a picture, in which distances may be infinitely multiplied, and that the perspective will hollow by causing the disappearance of the level surface that served as a foundation to the relief, which will be replaced by a sky, a landscape, the walls of a magnificent palace, or the interior of a cabin.

Daughter of light, Painting creates in its turn a light of her own, and in imitating the luminous effects she has observed in Nature, she carries in herself the elements of her clearness and her obscurity. It is not with the painter as with the architect or the sculptor, whose palpable creations are subjected to

the mobile and changing power of natural life. A monument that appears simple and grand by moonlight may lose these qualities in the light of day, if it is loaded with details and dwarfed by superfluous ornaments which were lost sight of in the uncertain light of the moon. A piece of sculpture expressive, almost tragic, like the "Pensieroso" of Michael Angelo, might change its character if its place were changed, and if, instead of being lighted from above, it received its light from below, which would disperse the profoundly melancholy shadows that envelop the face of the hero. On the contrary, the painter draws his light from his color-box, and even if it should please him to use only different shades of the same color, he is free to distribute upon his work light and shadow with this color alone, provided he conform to optical law. It is the sun, it is true, that lights up the canvas of the painter, but it is the painter himself who lights up his picture. In representing in it, according to his pleasure, the appearances of light and shadow he has chosen, he throws upon it a ray of his own spirit.

Free thus to illuminate his drama in a way that shall be invariable, he need not fear lest the external light should ever come to contradict the sentiment which has inspired him, and this liberty is precisely that which allows him to heighten the expression by the management of lights and shadows, the chiaro 'scuro. Although this expression is sometimes employed by painters to designate a crepuscular tone,

which holds the middle place between light and darkness, we must understand by chiaro-'scuro the essential part of painting — the art of illuminating it.

We have compared the drawn sketch of the painter to a monochrome bas-relief. Let us suppose now that this bas-relief has ceased to be one of marble; that it is composed of divers substances; that certain personages in it are clothed in light drapery in the shadow, and in the light in sombre drapery; that among the figures some are sunburned or black; that there are mingled in the composition some trees with brown foliage and others with pale leaves; see how the chiaro 'scuro is modified by the amount of black and white which the divers elements of the picture bring into it. The light, in meeting surfaces that absorb it, and those that reflect it, has changed the effect of the drawing and varied its aspect, without, however, destroying, in its mass, the great part of chiaro 'scuro that the painter had at first taken. These variations, introduced into the fine harmony of the drawing, by notes higher or lower, are what we call *values;* that is the degree of elevation, the effect of tone relatively to neighboring tones. The value of an object then, in painting, is the degree of force with which it reflects light. In the chiaro 'scuro of a picture, representing, for instance, a group of fruits, an orange would have less value than a lemon, because orange-color is less luminous than yellow. Thus, all the visible ob-

jects of Nature possess a degree of light which assigns them a place in the gamut of chiaro 'scuro, and gives them a value that is called their *tone*. This word, derived from the Greek τόνος signifies tension, vigor, expresses the sum of the luminous intensity, is synonymous with value.

We must then distinguish the tone from the *tint*, that is to say, from the color, although these two terms, tone and tint, because of their close relationship, are often employed the one for the other. Strictly speaking, the tone is independent of the tint and may be separated from it. The engraver, when he translates upon copper the colors of a picture, does nothing but separate the tone from the tint. Nature herself shows us every instant substances that have not the same tone although they have the same color. Lilac, for instance, which resembles violet in color, differs from it in tone, since lilac is a light violet, violet a dark lilac. Reciprocally, two objects may present the same tones and different tints. Thus, when the sky is darkened at the horizon and becomes of a bluish gray, it often happens that the foliage of a tree still lighted up by the sun, and which just now stood out boldly upon the horizon, becomes almost of the same tone as the sky, so that the painter can scarcely discern if the sky has more value than the tree, or if it is the light green of the tree which has more than the blue gray of the sky.

This distinction between tone and tint, between value and color, leads us to distinguish between

chiaro 'scuro and coloring; the first individualizes objects by relief, the second individualizes them by color. So long as the picture remains monochrome, it is far from having uttered its last word. It must still translate values into colors, clothe with countless shades of color forms which, in the economy of light and shade, play similar rôles; finally must replace the white light which detaches figures from one another, by the colored light, which, enriching them with its tints, will render its illusion more lively, its mirage more charming.

XII.

CHIARO 'SCURO, WHOSE OBJECT IS NOT ONLY TO PUT FORMS IN RELIEF, BUT TO CONVEY THE SENTIMENT THE PAINTER WISHES TO EXPRESS, IS SUBJECT TO THE REQUIREMENTS OF MORAL BEAUTY AS WELL AS THE LAWS OF NATURAL TRUTH.

FROM the little we know of ancient painting, and the little that remains to us of it, we may believe that light and shadow became a means of expression only in modern times. Under the influence of sculpture, which among the Greeks was the dominant art, their painting employed light and shade only for the imitation of projecting and reëntering parts of the figure. Philostratus, describing a figure of Venus, said the goddess was going out of the picture as if she wished to be pursued, and Pliny relates that in the picture of Alexander as "Jupiter Tonans," painted by Apelles, the fingers holding the thunderbolt seemed beyond the canvas. But it is not probable that Greek painting used the poetry of light and shadow to enhance the interest of the action represented. Modeled one by one in the open air, the figures of the Greek picture were, according to all appearance, placed together like those of a bas-relief; they did not form a whole having a significa-

tion through the charm of mystery or the triumph of brilliancy. It seems as if no trouble obscured the serene souls of the ancient painters and that they never suspected the *expression* of shadow. But after the long sadnesses of Christianity, humanity would one day awake with sentiments that antiquity never knew, or at least that it has not manifested in its art; melancholy, vague disquietude, the torments of superstition, all the shadows of the heart. When Greece rose again in Italy, when Athens called herself Florence, the ancient light reappeared, but through the veil of the sombre Middle Ages; then the first of the great modern geniuses, Leonardo da Vinci, brought into painting a new light, and, finding the eloquence of the shadow, made it apparent that chiaro 'scuro could express the depths of reverie as well as those of space, and, with all the reliefs of the body, all the emotions of the soul.

The moderns, not content with modeling separately each figure, have invented the *modeling of the picture*, that is to say, the treating it in its turn as a single figure, as a single whole, having its broad parts of clear, of brown, and of half-tints. Titian justly, and like the master he was, compared the chiaro 'scuro of a picture well lighted up by the painter, to the effect of a bunch of grapes, of which each particular grape offers on the side of the light, its light, its shadow, and its reflection, while all the grapes taken together present only a single large mass of light sustained by a broad mass of shadow.

This comparison leads us to the principle that governs the theory of light and shadow. This principle is unity; that is the harmony of the representation to the eye, and the harmony of the expression to the thought, and in addition, the accord demanded by sentiment between these two harmonies.

How much higher art is than nature when it moves in its own domain — the beautiful. A tempest may burst upon the ocean in full daylight, even when the sun is shining brightly; what artist would paint it without making the sky overcast, without adding the horror of the darkest clouds and the menaces of night? Is it not an expressive rôle that chiaro 'scuro plays in the "Shipwreck of the Medusa," traversed by that cold, pale light which glides over the dying and the dead, while on the far-off horizon a ray of hope furrows the sea? Oftentimes it happens that the sun shines upon catastrophes of which it is ignorant. Should the painter imitate this sublime indifference when he needs all the accumulated resources of his art to move the soul? "You are far behind your age," said a philosopher to an artist, "if you think it is without interest to know what the weather was in Rome the day Cæsar was assassinated." The opposite of nature, which distributes by chance her poesies in the infinite of time and space, painting has only a very limited space, only a brief moment in which to move us. Hence the laws of unity are imposed upon her, not as a shackle, but as a sure means of redoubling her energy, her power.

The choice of his light must be left to the will of the painter, but what treasures are contained in this liberty, what variety it promises. Let us run through the history of painters, or rather let us wander through the Gallery of the Louvre: we shall see that each of the great masters of painting has his chosen light, his favorite hour, his torch. Leonardo da Vinci preferred for his picture, as women do for their beauty, the tempered light of the lamp, or the twilight. It pleases him to play the music of chiaro 'scuro in a minor key and to let the sweet mystery of a veil fall over his most brilliant conceptions, as in that head of Mona Lisa, whose look fascinates us behind the wealth of poetry that seems interposed between her and us. "The face," he says, "acquires a singular grace and beauty by the blending of light and shadow. We see examples of it in persons seated at the doorway of a dark house and lighted up by a ray of the setting sun."

Rubens, the painter of external magnificence and show, opening wide all his windows to the sun, will dare to imitate its splendors. Rembrandt, on the contrary, a dreamy soul, an *interior* man, chooses a dark atelier into which he allows only a veiled light to penetrate. The commonplace light of day displeases, vexes him, he lives at ease only in the inner world of his thoughts, in the infinite melancholy and depth of his half-tints, produced by fantastic rather than natural light. He is lavish of shadows, he represents the stage of life as a half-obscure retreat, and

if the sun lights it up for an instant it will soon grow pale and lose itself in the harmonious silence in which it espouses the night.

An amorous and sad poet, Prud'hon, betrays his preference for softened shadows and pale lights. By the light of the moon he shows the grace of his elegy and the bitter pleasures of his grief; by her rays he paints his most horrible tragedies, the death of Abel and the death of Christ.

Others, like Elsheimer, Leonard Bramer, Honthorst devote themselves to the imitation of artificial light; they look at nature only by the light of torches, they love black night and they seek, in tradition, all subjects, all dramas whose terror may be redoubled by obscurity, for there is something pathetic in the shadows when they weigh down grief. Finally, there are found even in the bosom of our bright and well-balanced French school, fantastic geniuses, smitten with a love of extraordinary things, who have illumined their pictures, or rather their visions, with phosphorescent lights, and in our own days, Girodet, inspired by the poetry of Ossian, has evoked the shades of French soldiers in the palaces inhabited by the phantoms of Fingal and his followers, and has presented there the great generals of the Republic, Marceau, Kléber, Hoche, Desaix, Jourdan, and Dugommier, who, borne upon meteors, tear with their spurs the shining fogs of the Scandinavian Olympus.

But the liberty of the painter is still more extended,

for, when he has chosen his medium of lighting, he can suppose it narrow or wide, diffuse or concentrated, animated or cold. He can also direct the lines of light so as to heighten visible beauty, and in accordance with the sentiment his painting ought to express.

If he wishes to produce a startling effect and give the spectator the idea of an energetic relief, he will narrow the opening by which the light enters, and let it fall upon certain sides of the picture whose projection is then enhanced by well-defined shadows. He thus obtains positive distances, plainly marked after the manner of Caravaggio, Ribera, Valentin, at the risk of falling, like these masters, into the opaqueness of black, and of taking from the flesh-tints their natural aspect by giving them the appearance of plaster, or of leather yellow and hard, that does not allow either the color or the circulation of the blood to appear.

If he wishes to represent scenes that must have passed in the open air, he will, like Veronese and Rubens, choose a broad abundant light, of a nature to procure bright, gay masses sufficiently sustained by half-obscure backgrounds. It is not only to brilliant and pompous spectacles, like the "Marriage at Cana" or the "Coronation of Marie de Medicis," that a diffused and generous light is befitting, it suits any vast composition, whether destined to decorate a wall or to form a picture by itself, which would be intolerable if sad,

stifled by the extent of its shadows, especially if these were strongly marked. It is not probable that large spaces would be illuminated by a prison light. Leonardo da Vinci says: "Universal light gives more grace to figures than a particular and small light, because broad and powerful lights surround and embrace the relief of bodies, so that the works they light up unfold themselves from a distance and with grace, while those that have been painted under a narrow luminary take an immense amount of shadow, and at a distance seem like a flat painting."

From this apt observation it results that easel pictures are the only ones in which one can be sparing of light, because the spectator, before looking at them near at hand, discovers in them depths which at a distance would resolve themselves into a mass of black. Those who have visited the Museum of the Louvre have noticed two small pictures of Rembrandt — the "Philosophers." Each represents an old man meditating, in a subterranean chamber that receives, by a sort of air hole, a little light, which with difficulty traverses the dust-covered glass, oozes along the walls, crawls on the ground, vaguely indicates the form of the old man and loses itself in the night of the cavern. It is impossible to express better by the magic alone of light and shadow the tranquil melancholy and the silence of a solitary reverie. If we suppose Rembrandt to have painted his "Philosophers" life size, upon a canvas five or six yards long, we shall feel at once that these shadowy masses

would have lost all poetry and we should have two monstrous, almost ridiculous pictures, instead of the two diamonds of sombre painting. Rembrandt, it is true, in his famous " Night Watch," which is a large canvas, has given much extent and importance to his shadows; but he has taken care not to fall into the ink-tones of Caravaggio and Ribera, and his shadows, although embrowned by time, still preserve a beautiful transparency; they are, as it were, steeped in a light that slumbers in mystery like a secret and far-off reminiscence of the sun.

What shall be the angle of incidence of the chosen light? Shall it come from above, from below, or from the side? Shall we suppose it placed opposite the picture or behind it?

Winckelmann, in his "Remarks upon the Architecture of the Ancients," relates that the young girls of Rome, after they have been promised in marriage, are seen by their lovers for the first time in public, in the Rotunda of the Pantheon, because the light enters there by a single opening in the roof, and the light from above is most favorable to beauty. Women here are the best judges and from their decision there is no appeal. Man being the only one among living beings, to whom the upright attitude is natural, it is fitting he should receive the light from above, as this enhances all the graces of the human figure, of which height is the dominant dimension. The contrary is true of the scenes of nature. The mountains, the hills, the trees, the rivers, the ravines

and the other accidents of the landscape, lose a part of their character and their form when lighted perpendicularly. Thus, a field is never more interesting for a landscapist than when it is traversed obliquely, almost horizontally, by the rays of the rising or the setting sun.

In a gallery whose openings are made on the slope of the roof, statues produce the most agreeable effect and have the most dignity. A sheet of light extending itself over the breast enlarges it visibly, effaces the lower part of the ribs, lessens the projection of the abdomen, but it is the human head above all which under the light from above reveals all its beauties. The eyebrows become more prominent, the eyes more brilliant under the dark cavity hollowed by the arch of the brows, the cheek-bones slightly raised, the nose simplified and lengthened, marked by a luminous line that supports the shadow thrown where the black of the nostrils is softened and lost. Finally, unless it is absolutely perpendicular, the ray lights up the lower lip, models the chin, and leaving in shadow the setting of the neck, forms of it a dark column that supports the clear mass of the face.

Let the light come from below, all this beautiful order is overthrown. Who is not vexed to see the actresses of our theatres disfigure themselves by the glare of the foot-lights? How often is the play of the features falsified by this unnatural lighting, which casting a shadow upward from the cheek-bones, lends the face an equivocal expression of sorrow or malice.

It is noticeable that the monuments of antiquity cease to have all their significance when lighted horizontally, still more if from below, because the profiles of the capitals, the window-casings, the cornices, have been constructed with reference to the falling of water from the sky and the perpendicularity of the light, and the architect foresaw their shadow below, not above. Upon the monuments, as upon the human face, if the light strike full in front and in a way to swallow up the shadows, it flattens what it ought to put in relief. But if it come from the side or from behind, so that objects are more or less interposed between the light and the spectator, it may furnish piquant and unexpected effects, whose employment is not forbidden by good taste, if it is not by verisimilitude. Unfortunately these singularities always excite a mania for imitation. We remember a time in which certain romanticists, running after a facile originality, multiplied pictures lighted from below, and encircling with a luminous band figures sometimes transparent, sometimes dark, made them resemble living lanterns or mulattoes with snow on their shoulders.

Leonardo da Vinci says we should place a light background in contrast to a shadow and a dark background to a mass of light, and it is a general principle, a precept not to be attacked. There are colorists, however, who have thought to enhance the harmony of their pictures by uniting the brown of their figures to those of the background, and by accompanying the half-lights of the background with

the full light of the figures. But those are secrets beyond elementary instruction. He who possessed them in fullest measure was Correggio. He has drawn from them a voluptuous sweetness, which caresses the eye, softens the air, amplifies nature, unbends the mind, and adds a sentiment of happiness to the spectacles of life. When he has placed in his picture a broad, dominant light, he takes care to follow it by a half-tint; and if he wishes to return to a brilliant light in a smaller space, he does not pass at once to the degree of tone he had left, but leads our eyes to it by insensible steps, so that the sight of the spectator, according to the observation of Mengs, is awakened as a sleeper is drawn from slumber by the sound of an agreeable instrument, an awakening that resembles enchantment rather than interrupted repose.

"During my sojourn in Venice," said Sir Joshua Reynolds, "I employed the following method to utilize the principles of the Venetian masters. When I noticed an extraordinary effect of light and shadow in one of their pictures, I took a leaf from my note-book, covered all parts of it with black pencil marks, observing the same order and the same shading as in the picture, letting the white paper represent the light. After a few trials I found the paper was always covered with nearly similar masses. It seemed to me, finally, that the general practice of these masters was to give no more than a quarter of the picture to the light, including the principal and secondary lights, another quarter to shadow, and to reserve the rest for the half-tints.

Holding a paper thus pencilled in masses at some distance from the eye one will be surprised at the manner in which it will strike him; he will experience the pleasure that an excellent distribution of light and shadow causes, although he may not discern if what he sees be a historical subject, a landscape, a portrait, or a representation of still-life, for the same principles cover all branches of art."

That the mass of half-tints should occupy half the space to be covered, that the light and shadow should divide the other half is a happy solution and desirable as a satisfaction to the eye. Following the example of the Venetians, and upon the faith of an eminent painter, who was also a man of superior intelligence, we may adopt it. It needed nothing less than the genius of Rembrandt to change these relations and to limit the field of light to an eighth of the space. He who thinks only of pleasing the eye could not indulge in such economy of light, he must pay too dearly for the piquancy of the effect. But Rembrandt, who always addressed the eyes of the soul, could darken his picture to enhance its moral expression and sacrifice the external gaiety of the spectacle to the profounder poetry of the thought. In the absence of such poetry the abundance of black would only sadden and discourage the beholder.

Bolder than the Venetians, and animated by a genius the opposite of that of Rembrandt, Rubens, in his pictures, has assigned to the light about a third of the surface to be covered. Hence that mag-

nificence, that seductive pomp, bright and facile, which so enchants us we desire to see the scenes he has represented, to plunge in the waters in which his Nereids bathe, to walk in the palaces he has built for his heroes, and which are open to his gods. But in pictures so generously illuminated, the effect must be sustained by the variety and quality of the colors. The brilliancy Rubens has attained does not depend upon the vigor of dark masses, but upon this, he has exalted his light without giving more energy to his shadows. It was of Rubens Montabert was thinking when in his "Traité de Peinture" he says: "Every day we admire the dazzling flesh-tints of certain children upon whom the light falls in a striking manner in the streets, in the open air, in full sunlight; this brilliant light does not throw on their fresh heads any dark, heavy shadow; all is clear, rounded, and in strong relief, all is tender and fresh, yet nothing too soft, too undecided. To imitate such effects the painter must double the brilliancy of his light and not increase the depth of his shadows."

Whatever may be the division of light and shade, its optical beauty is under the sovereign law of unity. That is to say, the picture must not offer two light masses of equal intensity, nor two dark masses of equal vigor. The sure means of destroying the effect of a light or the value of a shade, is to assimilate to it a second luminous or dark mass. It is moreover evident that to interest, every picturesque spectacle ought to present one

dominant point of light in the mass of light, and one dominant dark point in the mass of shade, without which the attention is divided, the uncertain look is wearied, the interest lost. Look, for instance, at a bust portrait of Rubens or Van Dyck, if the figure is dressed in black and wears a hat, the dark mass of the hat will be less in volume than that of the coat, if the two browns should balance each other in size, the portrait would be intolerable, the equilibrium of the whole destroyed by the equilibrium of the blacks. If the model wears his own hair, his head will form the dominant light, and if a hand is visible, it will not be so light as the face; if the hand hold a glove, that hand and glove may not form a mass equal to the head in size, the glove should be represented of chamois leather, of a neutral tint, like those of Titian and Velasquez; or should be soiled that the second light may not be so prominent as the first.

By "the unity of chiaro 'scuro" we must understand, there will be one principal mass of light, one dominant mass of brown, because all rivalry would produce a conflict of equivalent forces that would disconcert the eyes and hold in suspense the desired impression. In the picture, as in nature, the light ought to be *one*, but not *unique*. When the sun illuminates creation, its rays mirrored by the waters, reflected by the clouds, themselves call forth secondary lights which enhance the brilliancy of the orb and form a cortége for his triumph. So, after sunset, the

planets, at the infinite distance at which we perceive them in the firmament, shine like luminous points that modestly accompany the torch of night, and augment its lustre by their far-off scintillations.

For the moral expression of the picture two foci of light, of which one is subordinate to the other, sometimes produce a touching and marvelous effect. A proof that light and shade have as much affinity with the soul as with the sight, is that the French, guided by the mind rather than by temperament, are of all painters, Rembrandt excepted, those who have best understood the eloquence of chiaro 'scuro. How beautiful we should think the "Clytemnestre" of Guérin, were it the work of a foreign artist! What fascination in the light of the lamp that falls upon the sleeping Agamemnon, and which, intercepted by a purple curtain, has already taken the hue of blood! What a touching contrast between the two figures of Egistheus and Clytemnestra, the fever of their crime in that sinister half-tint, and the profound peace of the sleeping hero, represented to the eye by the quiet moonlight shining upon an inner court of the palace of Argos. . . . It is remarkable that a School that is thought to disdain the resources of chiaro 'scuro and of color, has produced the sleeping "Endymion," caressed by the rays of an invisible goddess, that Prud'hon never wearied of admiring, and the "Virgil reading the Æneid," in which Granet has found an effect so tragic in the image of Marcellus rising like a spectre evoked by the poet and projecting upon the

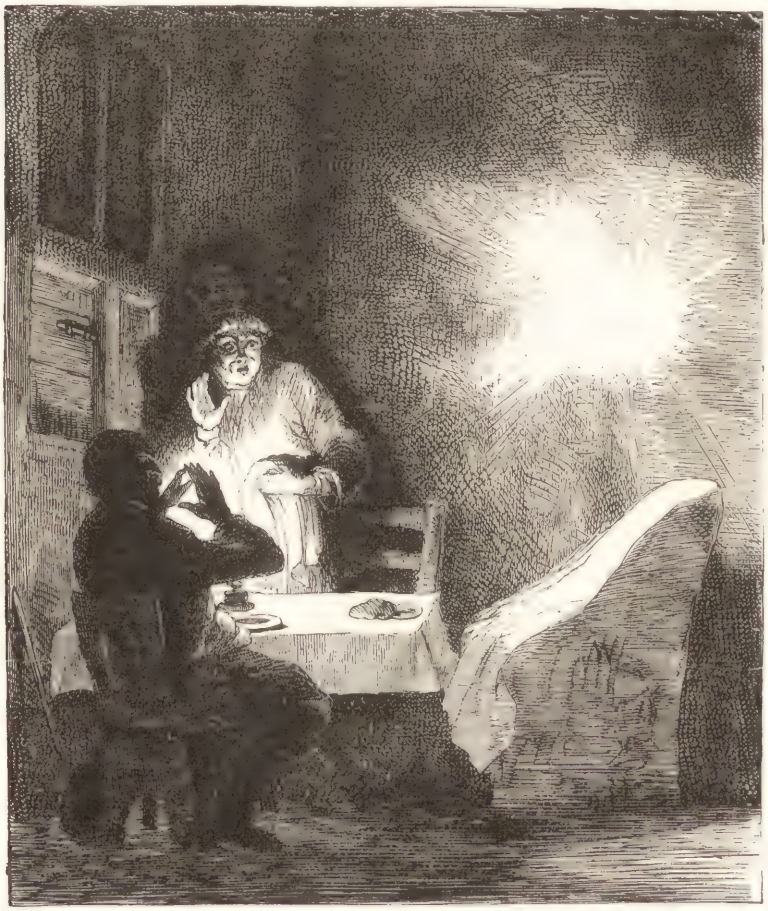
wall a shadow, colossal and indistinct, the shadow of a phantom.

But we must confess it was reserved for Rembrandt to fathom the mysteries of chiaro-'scuro. "He is the *clair-obscuriste par excellence*," said David to his pupil, Auguste Couder. In truth, how many things he has expressed by the play of light and shadow, this great painter of foggy Holland, whether he represents Christ resuscitating Lazarus, by causing the light of life to shine in the tomb, or appearing to the Magdalen as a luminous body about to melt and vanish in the divine essence, or the angel flying in a miraculous light from the family of Tobias, or in the humble home of a carpenter, where a mother is suckling her child, letting fall a ray from heaven which suddenly announces to us that this mother is a Virgin, and her child promises us a God!

There is a composition by Rembrandt in which light plays a sublime rôle. It is a thought rapidly written, a sketch washed in with bistre for the picture of the "Supper at Emmaus." The two disciples, at table with Jesus Christ, have seen him suddenly disappear from before them and are seized with religious terror, for in the place where they had just heard his voice and broken bread with him, they see a supernatural light that has replaced the vanished God.

The painter who has imitated the conflict of day and night has still to imitate the presence of air and the depths of space. The perspective that changes

the lines, changes also the tones, and as a noise grows feebler by distance and ends in silence, so shadows and lights, in proportion to their distance



THE SUPPER AT EMMAUS. BY REMBRANDT.

from the eye, undergo a perceptible diminution, and at a great distance are neither light nor shadow, they vanish in the tone of the air. Leonardo da Vinci has

proved, by a geometrical figure, that this diminution can be measured. We may, moreover, observe the phenomenon at the entrance of a long gallery, equally lighted in its whole extent, and sustained by columns or ornamented with statues at equal distances from each other. If the spectator places himself so as to see all the statues detached from each other, he will perceive that the second is less brilliant than the first, and the third than the second, and so on. On the other hand the shadows that were strong on the first are softened upon the second, and are less and less strongly marked from one to another to the last statue, which is, at the same time, the least luminous and the least shaded, consequently the most indistinctly seen. It is needless to add that at equal distances this weakening of tone becomes more apparent in a thick and vaporous than in a pure atmosphere. But such a diminution in painting is not the result solely of the lessening of the lights and the softening of the shadows; it is obtained by the character of the execution, the *touch*. Objects advance or retreat not only on account of their light or their darkness, but also, and above all, through the precision or vagueness with which the painter shows them to us, that is to say, through the strength or the weakness of the touch, for it may chance that a distance is light and yet remains distant, as it also may happen that the darkest objects are nearest the frame. These vigorous masses that painters sometimes put in the foreground, — they would be better in the middle-distance, — are called *repoussoirs*, be-

cause their aim is to make the far-off objects seem farther. To render the distances of his landscape more luminous, Claude Lorraine took care to place in the foreground tufted trees with dark foliage, or ruins of vigorous tone, which, in his picture, serve the same purpose that side-scenes do for the stage of a theatre. Provided they are not awkwardly employed, and the painter knows how to give them an appearance of reality, these masses may be a useful resource and even a necessary artifice when the wish is to heighten the distance and to simulate a vast horizon. In the portrait at the Louvre of the "Young man dressed in black," that so long bore the name of Raphael, but is now attributed to Francia, in this portrait with an expression so grave, so penetrating, and so sad, I was about to say poignant, the whole bust forms, by the depth of its shadows, an admirable *repoussoir*, behind which, vanishing out of sight, is a landscape that fascinates the look and the thought of the spectator, when, after contemplating the sad reverie of this young man he turns to the calmness of nature.

Thus chiaro 'scuro contains a beauty that alone might almost suffice to painting, for it suffices to the relief of the body and expresses the poetry of the soul. But what marvels this great art will produce, when the painter, decomposing the light, shall have drawn from it an infinite variety of tints, to clothe with them the unity of his chiaro 'scuro, when, finally, he shall have found his color-box in a sunbeam!

XIII.

COLOR BEING THAT WHICH ESPECIALLY DISTINGUISHES PAINTING FROM THE OTHER ARTS, IT IS INDISPENSABLE TO THE PAINTER TO KNOW ITS LAWS, SO FAR AS THESE ARE ESSENTIAL AND ABSOLUTE.

IF there is affinity between chiaro 'scuro and sentiment, much more is there between sentiment and color, since color is only the different shades of chiaro 'scuro.

Supposing the painter had only ideas to express, he would perhaps need only drawing and the monochrome of chiaro 'scuro, for with them he can represent the only figure that thinks, — the human figure, which is the *chef d'œuvre* of a designer rather than the work of a colorist. With drawing and chiaro 'scuro he can also put in relief all that depends upon intelligent life, that is life in its relation to other lives, but there are features of organic, of interior and individual life that could not be manifested without color. How for instance without color give, in the expression of a young girl, that shade of trouble or sadness so well expressed by the pallor of the brow, or the emotion of modesty that makes her blush? Here we recognize the power of color, and

that its rôle is to tell us what agitates the heart, while drawing shows us what passes in the mind, a new proof of what we affirmed at the beginning of this work, that drawing is the masculine side of art, color the feminine.

As sentiment is multiple, while reason is one, so color is a mobile, vague, intangible element, while form, on the contrary, is precise, limited, palpable and constant. But in the material creation there are substances of which drawing can give no idea; there are bodies whose distinctive characteristic is in color, like precious stones. If the pencil can put a rose under the eye, it is powerless to make us recognize a turquoise or a ruby, the color of the sky or the tint of a cloud. Color is *par excellence*, the means of expression, when we would paint the sensations given us by inorganic matter and the sentiments awakened in the mind thereby. We must, then, add to chiaro 'scuro, which is only the external effect of white light, the effect of color, which is, as it were, the interior of this light.

We hear it repeated every day, and we read in books that color is a gift of heaven; that it is an impenetrable arcanum to him who has not received its *secret influence;* that one learns to be a draughtsman but one is born a colorist, — nothing is falser than these adages; for not only can color, which is under fixed laws, be taught like music, but it is easier to learn than drawing, whose absolute principles cannot be taught. Thus we see that great designers are

as rare, even rarer than great colorists. From time immemorial the Chinese have known and fixed the laws of color, and the tradition of those laws, transmitted from generation to generation down to our own days, spread throughout Asia, and perpetuated itself so well that all oriental artists are infallible colorists, since we never find a false note in the web of their colors. But would this infallibility be possible if it were not engendered by certain and invariable principles?

What, then, is color?

Before replying, let us take a look at creation. Beholding the infinite variety of human and animal forms, man conceives an ideal perfection of each form; he seeks to seize the primitive exemplar, or at least, to approach it nearer and nearer, but this conception is a sublime effort of his intelligence, and if, at times, the soul believes it has an obscure souvenir of original beauty, this fugitive memory passes like a dream, and the perfect form that issued from the hand of God is unknown to us; remains always veiled from our eyes. It is not so with color, and it would seem as if the eternal colorist had been less jealous of his secret than the eternal designer, for he has shown us the ideal of color in the rainbow, in which we see, in sympathetic gradation, but also in mysterious promiscuity, the mother-tints that engender the universal harmony of colors.

Whether we observe the iris, or look at the soap-bubbles with which children amuse themselves, or,

renewing the experiment of Newton, use a triangular prism of crystal to analyze a ray of light, we see a luminous spectrum composed of six rays differently colored, violet, blue, green, yellow, orange, red. How do these colors strike the eye? As sounds do the ear. As each sound echoes in modulating itself upon itself and passes, by vibrations of equal length, from fullness to a murmur, and from a murmur to silence, so each color seen in the solar spectrum has its maximum and minimum of intensity; it begins with its lightest shade and ends with its darkest.

Newton saw seven colors in the prism, doubtless to find a poetical analogy with the seven notes of music; he has arbitrarily introduced, under the name of *indigo*, a seventh color which is only a shade of *blue*. It is a license that even the greatness of his genius cannot excuse. These seven colors he called *primitive;* but in reality there are only three primitive colors. We cannot put in the same rank *yellow*, *red*, and *blue*, which are simple colors, and *violet*, *green*, and *orange*, which are composite colors, because we can produce them by combining two by two the first three, the *orange*, by mixing yellow and red, the *green*, from yellow and blue, the *violet*, from blue and red.

Antiquity, which did not wait till Newton's day, to observe the colored light of the iris, admitted only three as truly mother-colors, and the evidence of truth forces us to-day to return to the principle of the ancients, and to say, there are three primary

colors, yellow, red, blue, and three composite or binary colors, — orange, green, violet. In the intervals that separate them, are placed the intermediate shades whose variety is infinite, and which are like the sharps of color which precede, and the flats which follow them.

Separated, these colors and these shades enable us to distinguish and recognize all the objects of creation. Reunited they give us the idea of white. White light is the union of all colors, all are contained and latent in it.

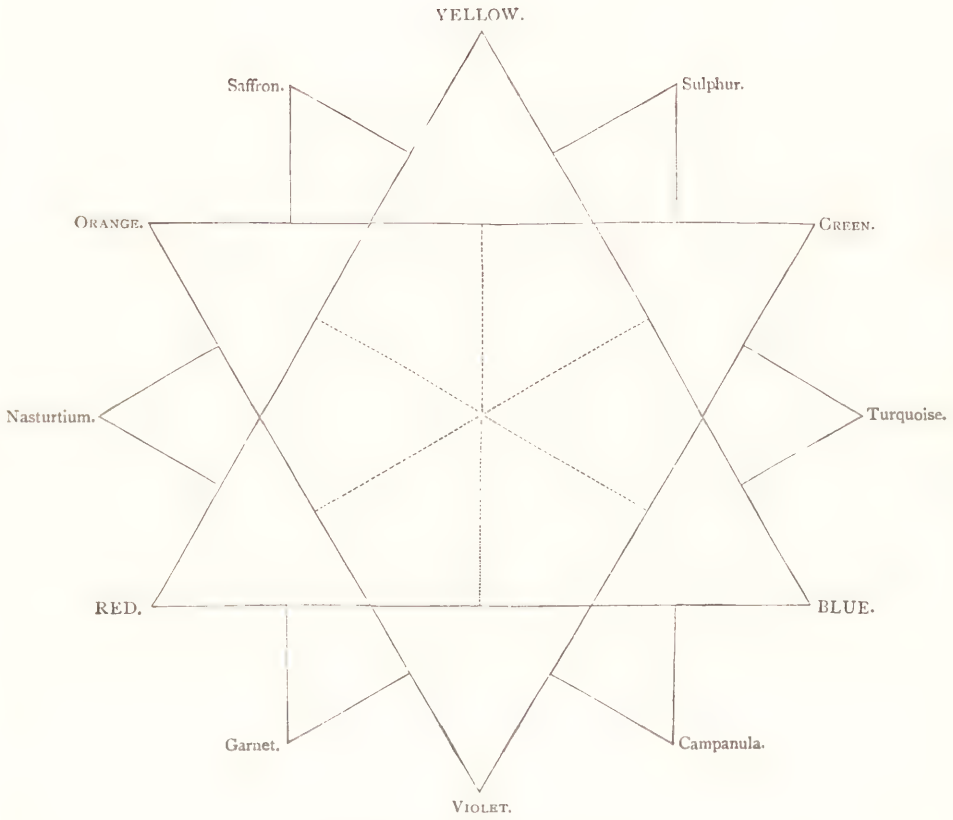
This composition of white light once known, we can define color. It is the property all bodies have of reflecting certain rays of light, and absorbing all others. The jonquil is yellow, because it reflects the yellow rays and absorbs the red and blue. The oriental poppy is scarlet, because it reflects only the red rays and absorbs the blue and yellow. If the lily is white, it is because, absorbing no ray, it reflects all, and a body is black because absorbing all rays, it reflects none. White and black, properly speaking, are not colors, but may be considered as the extreme terms of the chromatic scale.

White light containing the three elementary and generative colors, yellow, red, and blue, each of these colors serves as a *complement* to the other two to form the equivalent of white light. We call *complementary* each of the three primitive colors, with reference to the binary color that corresponds to it. Thus blue is the complement of orange, because

orange being composed of yellow and red, contains the necessary elements to constitute white light. For the same reason yellow is the complement of violet, and red of green, Reciprocally each of the mixed colors, produced by the union of two primitive colors, is the complement of the primitive color not employed in the mixture; thus orange is the complement of blue, because blue does not enter into the mixture that produces it.

Law of complementary colors. If we combine two of the primary colors, yellow and blue, for instance, to compose a binary color, *green*, this binary color will reach its maximum of intensity if we place it near its complement — *red.* So, if we combine yellow and red to form *orange*, this binary color will be heightened by the neighborhood of *blue.* Finally, if we combine red and blue to form *violet*, this color will be heightened by the immediate neighborhood of *yellow.* Reciprocally, the red placed beside the green will seem redder; the orange will heighten the blue, and the violet the yellow. It is the reciprocal heightening of complementary colors in juxtaposition that M. Chevreul called "*The law of simultaneous contrast of colors.*"

But these same colors that heighten each other by juxtaposition, destroy each other by mixture. If you place red and green in equal quantities and of equal intensity upon each other, there will remain only a colorless grey. The same effect will be produced if you mingle, in a state of equilibrium, blue and



See Frontispiece for colored diagram.

orange, or violet and yellow. This annihilation of colors is called *achromatism.*

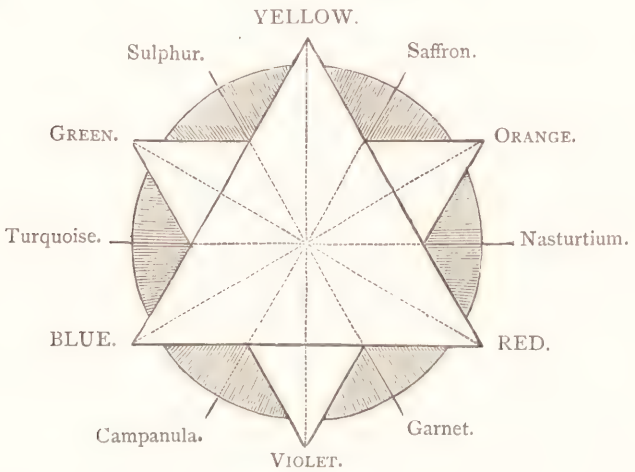
Achromatism is also produced if we mingle in equal quantities, the three primitive colors, yellow, red, blue. If we pass a ray of light across three cells of glass filled with three liquids, yellow, red, blue, the ray that has traversed them will pass out perfectly achromatic, that is colorless. This second phenomenon does not differ from the first, for if the blue destroys the orange, it is because the orange contains the two other primary colors, yellow and red; and if the yellow annihilates the violet, it is because the violet contains the two other primary colors, red and blue. Thus we see how just is the expression, friendly and hostile colors, since the complementaries triumphantly sustain or utterly destroy each other.

To enable one to recall this phenomenon it is indispensable to the reader to form a chromatic rose or to have present to the mind that of which we give a drawing accompanied by a colored engraving.[1]

At the angles of the upright triangle are the three primary colors, yellow, red, blue; at the angles of the reversed triangle, the binary colors, orange, green, and violet; between these six colors combined

[1] This rose of colors is a mnemonic image. It in some sort renders visible the law of complementaries, and expresses its truths. If we divide the circumference into 360° we see clearly that each of the perfect binary colors is equally distant from the two primaries that compose it. Thus orange is 60° from the yellow and 60° from the red. We see also where the domain of the six colors begins and ends.

two by two are placed the intermediate shades; sulphur, turquoise, campanula, garnet, nasturtium, saffron.



Observe; if we choose in this rose three colored points, that form an equilateral triangle, the colors situated at these three points will have all the properties of the complementaries. Let us take, for instance, the sulphur, nasturtium, and campanula; these three tints, being placed at the angles of an equilateral triangle, will be perfectly achromatic, that is, united in equilibrium, they will absolutely destroy each other, while if we place together the sulphur and the garnet which is exactly opposite it, they will reciprocally heighten each other, because they are complements each of the other.

But the complementary colors have other virtues not less marvellous than those of mutually heightening and destroying each other. "To put a color

upon canvas," says Chevreul, "is not merely to tint with this color all that the pencil has touched, it is also to color with its complement the surrounding space; thus a red circle is surrounded by a light green aureole, less and less strongly marked according to its distance from the red; an orange circle is surrounded by a blue aureole, a yellow circle by a violet, and reciprocally."

This had already been noticed by Goethe and by Eugène Delacroix. Eckermann relates ("Conversations de Goethe"), "that walking in a garden with the philosopher, upon an April day, as they were looking at the yellow crocuses which were in full flower, they noticed that turning their eyes to the ground, they saw violet spots." At the same epoch, Eugène Delacroix, occupied one day in painting yellow drapery, tried in vain to give it the desired brilliancy and said to himself: "How did Rubens and Veronese find such brilliant and beautiful yellows?" He resolved to go to the Louvre, and ordered a carriage. It was in 1830, when there were in Paris many cabs painted canary color; one of these was brought to him. About to step into it, Delacroix stopped short, observing to his great surprise that the yellow of the carriage produced violet in the shadows. He dismissed the coachman, entered his studio full of emotion, and applied at once the law he had just discovered, that is, that the shadow is always slightly tinged with the complement of the color, a phenomenon that becomes apparent when the light of the

sun is not too strong, and "our eyes," as Goethe says "rest upon a fitting background to bring out the complementary color."

Is this color produced by the eye? It is not for us to decide; but it is certain that in going out of a chamber hung with blue, for instance, for some moments we see objects tinted with orange. "Let us suppose," says Monge ("Géométrie Descriptive"), that we are in an apartment exposed to the sun, whose windows are covered with red curtains; if in the curtain there is a hole three or four lines in diameter, and a white paper be held at a little distance to receive the rays of light that pass through this hole, these rays will make a *green* spot upon the paper; if the curtains were green the spot would be red."

Monge does not give the reason of the phenomenon. I believe it is, that our eye being made for white light, needs to complete it when it receives only a part. To a man who perceives only *red* rays, what is necessary to complete the white light? Yellow and blue; but these are both contained in *green*. It is green then that will reëstablish the equilibrium of the light in an eye wearied by red rays.

From having known these laws, studied them profoundly, after having intuitively divined them, Eugène Delacroix became one of the greatest colorists of modern times, one might even say the greatest, for he surpassed all others, not only in the æsthetic language of his coloring, but in the prodigious variety of his motives and the orchestration of his colors.

Like a singer endowed with the whole register of the human voice, he has widened the limits of painting by adding new expressions to the language of art.

Again, if we mix two complementary colors in unequal proportions, they will partially destroy each other, and we shall have a broken tone that will be a shade of grey. Make, for instance, a mixture in which there shall be ten parts yellow and eight violet; there will be destruction of color or achromatism for eight tenths, but the other two tenths will form a grey shaded with yellow, because there was excess of yellow in the mixture. Thus are formed all the innumerable varieties of color that we call lowered tones, as if nature employed for her ternary colorations the destruction of color, as she uses death to maintain life.

The law of complementary colors once known, with what certainty the painter will proceed whether he wishes to attain brilliancy of color, to temper his harmony or to make it striking by abruptly bringing together tints that suit the expression of a warlike or tragic scene. Suppose it is necessary to lower a vivid vermilion, the artist learned in the laws of color, instead of softening by soiling it at hazard, will lower it by the addition of blue, and thus will follow the path of nature.

But without even touching a color, one can strengthen, sustain, lower, almost neutralize it, by working upon its neighbor. If we place in juxtaposition two similars in a pure state, but of different de-

grees of energy, as dark red and light red, we shall obtain a contrast by the difference of intensity and a harmony by the similitude of tints. If we bring together two similars, one pure, the other broken, for instance, pure blue and grey blue, there will result another kind of contrast that will be moderated by resemblance. The moment colors are not to be employed in equal quantities, nor of equal intensity, the artist is free, but within the limits of infallible laws. He must try his *doses*, must distribute to his tints their places and rôles, calculate the extent he will give them, and make, as it were, a secret rehearsal of the drama his coloring will form. He must employ the resources of white and black, foresee the optical mixture, know the vibration of the colors, and finally take care of the effect the diversely colored light is to produce, according as it is of the morning or the evening, from the North or the South.

White and Black. Two centuries before Newton, Leonardo da Vinci wrote, "White is not a color by itself, it contains all colors." White, in truth, is never whiter, that is more perfect, than when it reflects the most light and is absolutely colorless. Of black there are several kinds: negative black, that produced by the thickest shades of night; black by intensity, that produced by a primary color at its highest degree of concentration. Suppose three cylinders of glass filled with the most concentrated yellow, the darkest blue, the most intense red; each of these three primary colors will give the notion of black.

But if you mix white with this black, the quality yellow, red, or blue of the color in the cylinder will reappear, and the coloration will become more brilliant in proportion as you increase the quantity of white, in other terms, the quantity of light, — normal black is formed by the mingling of the three primary colors, in a state of equilibrium, and at their maximum of intensity, a mixture that produces, as we have seen, achromatism. "The richer the colors are in coloring principles," says Charles Bourgeois ("Manuel d' Optique expérimentale"), "the more obscure is the achromatism." As the least excess of yellow, red, or blue suffices to shade the achromatism, the painter in composing his black may leave in it an imperceptible coloration, in view of the effect he wishes to obtain. But freed from all shade, in a pure state, black is no more a color than white.

What, then, will be the effect of black and white in painting?

If the coloring of the picture is of extreme magnificence and of great variety, the white and black — whether in pure state or as grey — acting as non colors will serve to rest the eye, to refresh it, by moderating the dazzling brilliancy of the whole representation. But applied against a particular color the white heightens, the black lowers it. Why? Because a red, for instance, is less luminous the redder it is, if we place white near it becomes comparatively less light, consequently redder. On the contrary, if you place black beside the red, the latter will

seem less red; for all that a color gains in light it loses in energy. The proof is that by force of light it would vanish in white, as by force of vigor and concentration it would resolve itself into black. One more example. Let us take *cinnabar*, a substance composed of sulphur and mercury, from which we obtain the brilliant red used in glass painting. The ore is a dull red, but as it is broken it acquires more surface, and penetrated by the white of the light loses the dull, dark color, and when reduced to an impalpable powder, becomes of a brilliant scarlet — *vermilion.*

Independent of these actions and reactions, — I say reaction because every color put beside white or black tints them slightly with its complement, — black and white have an æsthetic value, a value of sentiment. Thus the spot of white upon the mantle of Virgil in Delacroix' " Barque du Dante," is a terrible lighting up in the midst of the darkness; it shines like the lightning that furrows the tempest. At other times this powerful colorist uses white to correct the contiguity of two colors like red and blue. In one of the pendentives that so magnificently decorate the Library of the Corps Legislatif, the executioner who has cut off the head of John the Baptist is dressed in red and blue, two colors whose juxtaposition is softened by a little white which unites them without sacrificing the energy suitable to the figure of an executioner. Thus we realize a rare harmony, that of the tricolor-flag. Ziegler has observed that

this flag spread out horizontally presents a discordant whole, but through the effects of the folds, the quantities become unequal and one color dominating another harmony is produced. "The wind that agitates the stuff in varied undulations makes the three colors pass through all the attempts at proportion that an intelligent artist can do; sometimes the effect is admirable."

White and black should appear in the picture only in small doses, black especially, which, instead of being extended over a great space, should be divided and repeated upon narrow spaces as a sordine to the color in a lugubrious picture. Black and white thus dispersed produce a tragic effect in the "Shipwreck of Don Juan," in which, upon a dark emerald sea, they detach themselves like funeral notes that express to the eye the anguish of these shipwrecked ones whom hunger has maddened and who are tossed between the hope of life and the grasp of death.

The Optical Mixture. One day in the library of the Luxembourg we were struck with the marvellously rich effect produced by Delacroix, the painter of the central cupola, where the artist had to combat the obscurity of the concave surface he had to paint, and to create an artificial light by the play of his colors. Among the mythological or heroic figures that made up the decoration, and which were walking in a sort of enchanted garden, we distinguished a half-nude woman, seated in the shadows of this Elysium, whose flesh preserved the most delicate, the

most transparent tints. As we were admiring the admirable freshness of this rose-tone, an artist friend of Delacroix, who had seen him at work, said smiling, "You would be surprised if you knew what colors had produced the rosy flesh that charms you. They are tones that seen separately would seem as dull as the mud of the street." How was this miracle wrought? By the boldness with which Delacroix had slashed the naked back of this figure with a decided green, which partly neutralized by its complement rose, forms with the rose in which it is absorbed a mixed and fresh tone apparent only at a distance, in a word a *resultant* color which is what is called the optical mixture.

If at a distance of some steps, we look at a cashmere shawl, we generally perceive tones that are not in the fabric, but which compose themselves at the back of our eye by the effect of reciprocal reactions of one tone upon another. Two colors in juxtaposition or superposed in such or such proportions, that is to say according to the extent each shall occupy, will form a third color that our eye will perceive at a distance, without having been written by weaver or painter. This third color is a resultant that the artist foresaw and which is born of optical mixture.

But how to obtain these mixtures without making the form bend to the intentions of the colorist? That is the feeble side of all painting in which color dominates. When our eye perceives simultaneously several colors, the resultant effect depends upon the

form of the objects colored, their proportions, their manner of being, their dependence, their grouping. To understand this let us suppose two complementary colors, red and green, placed in juxtaposition





upon a rectangular panel divided into two bands R. G. the two colors will reciprocally heighten each other, especially along the frontier that separates them.

If now we cut another panel in very narrow parallel bands, and paint these bands alternately red and green, the eye no longer perceiving distinctly the red and green bands, the *individuality* of the color will disappear with the individuality of the form, and it will happen that the red and the green mingling with and destroying each other by this apparent mixture, optical mixture, the second panel will appear grey and colorless.





If the line of junction be broken so as to permit the mutual penetration of the contraries, it will produce upon the lines A B a perfectly colorless tint, upon condition that the indentations shall be small

enough to be confounded to the eye. But if the proportion changes and the indentations are unequal there will appear a reddish grey or a greenish grey of charming delicacy.





A similar phenomenon will be produced upon a yellow stuff starred with violet and upon a blue stuff sown with orange spots.

The Vibration of Colors. "The parallel between sound and light is so perfect it is sustained even in the least particulars." Thus said a savant of genius, Euler ("Lettres à une princesse d' Allemagne"). As the grave or sharp sounds depend upon the number of vibrations of the stretched cord in a given time; so we may say that each color is restricted to a certain number of vibrations which act upon the organ of sight as sounds do upon the organ of hearing. Not only is vibration a quality inherent in colors, but it is extremely probable that colors themselves are nothing but the different vibrations of light. Why does the flower, so fresh and brilliant, lose its color if we detach it from the stem? Because for want of the nourishing juice it will lose all vigor, all spring, and the tissue, like a relaxed cord, will not render the same number of vibrations.

The Orientals, who are excellent colorists, when they have to tint a surface smooth in appearance,

make the color vibrate by putting tone upon tone in a pure state, blue upon blue, yellow upon yellow, red upon red; thus they obtain harmony in their stuffs, carpets, or vases, even when they have employed but a single tint, because they have varied its values from light to dark. A man who possessed marvellous knowledge of the laws of color and of decoration from having studied them in the Orient, Adalbert de Beaumont, was the first among us to react against that equality of color we sought in our fabrics as a perfection, and which the Chinese properly regard as a fault. "The more intense the color, whether red, lapis-lazuli, or turquoise," says de Beaumont, "the more the Orientals make it *miroiter*, shade it upon itself, to render it more intense and lessen its dryness and monotony, to produce, in a word, that vibration without which a color is as insupportable to our eyes as under the same conditions a sound would be to our ears."*

Color of the Light. In nature the light comes to us variously colored, according to climate, the medium, the hour of the day. If the painter have chosen an effect of colorless light, of diffused and grey light, the laws of the heightening and enfeebling of the colors will not be contrary to those of chiaro 'scuro, that is to say it will suffice to render vigorously the colors in the light and to soften them in the shadow (except for shining stuffs and polished bodies like satin, coats of mail, etc). But if the painter chooses a cold and blue light, or warm and

orange, he cannot represent the phenomena produced if he has not the notions of color.

Blue drapery, for example, under the cold light of the north will have its blue heightened in the light, attenuated in the shade. On the contrary if the light is orange like that of the sun, this same drapery will seem much bluer in the shade and less so in the light. Why? Because the mixture of the complementary colors will have substituted a tinted grey for the pure blue of the stuff in the lightest portions. Now replace the blue by orange drapery, pour upon it the light from the north, the blue of this light will partly neutralize the orange, but that will happen only in the light, for in the shadow the orange, finding itself sheltered from the rays that would have taken its color, will preserve all the value the shadow can give it. Whence it results that the effect of colored light upon colors can be obtained only by the absolute knowledge of the phenomena we have described.

Such are the laws that must guide the painter in the play of colors; such are the riches at his disposal. Happy if he adds to optical beauty the expression of the wished-for sentiment, if tuning his palette to the diapason of the fable or history, he knows how to draw from it the accents of poetry. In truth it is only in our days that the eloquence, the æsthetic value of color has been discovered. Veronese and Rubens are always intent upon presenting a fête, playing a serenade, even when the drama repre-

sented demands sombre, austere, or cold harmonies. Whether Jesus Christ is seated at the marriage at Cana, or marches to Calvary, or appears to the disciples at Emmaus, Veronese scarcely changes the moral character of his colors. He does not renounce the enchantment of the eye, with naïve serenity he contradicts at need the severity of the theme by external magnificence. In his turn Rubens scarcely makes a difference in the coloring he uses to paint those superb women in the "Garden of Love," and that which will show us in a "Last Judgment," these same women, like a stream of fresh and rosy bodies, precipitated into hell. Even when he wishes to frighten he is determined to seduce.

More poetical, more penetrated by his subject, more moved by his emotion, Eugène Delacroix never fails to tune his lyre to the tone of his thought, so that the first aspect of his picture shall be the prelude to his melody, grave or gay, melancholy or triumphant, sweet or tragic. Afar off, before discerning anything, the spectator forebodes the shows that will strike his soul. What desolation in the crepuscular sky of the "Christ at the Tomb." What bitter sadness in the picture of "Hamlet and the Grave-diggers." What a sensation of physical well-being in the "Jewish Wedding in Morocco," whose harmony, composed of two dominant and complementary colors, red and green, gives the idea of coolness while allowing us to divine without an incandescent sun. What a flourish of trumpets in the coloring of the "Jus-

tice of Trajan," in which we see the Roman Emperor in his pomp and his purple issuing from a triumphal arch, accompanied by his generals, his trumpeters, and his eagles, while a woman bathed in tears, throws at his feet a dead child. Below, livid tones; above, the splendid, radiant gamut, an arch filled with azure, a sky that becomes dazzling by the contrast formed by the tones of an orange-colored trophy.

Thus colorists can charm us by means that science has discovered. But the taste for color, when it predominates absolutely, costs many sacrifices; often it turns the mind from its course, changes the sentiment, swallows up the thought. The impassioned colorist invents his form for his color, everything is subordinated to the brilliancy of his tints. Not only the drawing bends to it, but the composition is dominated, restrained, forced by the color. To introduce a tint that shall heighten another, a perhaps useless accessory is introduced. In the "Massacre of Scio," a sabre-tache has been put in the corner solely because in that place the painter needed a mass of orange. To reconcile contraries after having heightened them, to bring together similars after having lowered or broken them, he indulges in all sorts of license, seeks pretexts for color, introduces brilliant objects; furniture, bits of stuff, fragments of mosaic, arms, carpets, vases, flights of steps, walls, animals with rich furs, birds of gaudy plumage; thus, little by little, the lower strata of nature take the first place

instead of human beings which alone ought to occupy the pinnacle of art, because they alone represent the loftiest expression of life, which is thought.

In passionately pursuing the triumph of color, the painter runs the risk of sacrificing the action to the spectacle. Our colorists go to the Orient, to Egypt, Morocco, Spain, to bring back a whole arsenal of brilliant objects; cushions, slippers, narghilehs, turbans, burnous, caftans, mats, parasols. They make heroes of lions and tigers, exaggerate the importance of the landscape, double the interest of the costume, and of inert substances, and thus painting becomes descriptive; high art sensibly declines and threatens to disappear.

Let color play its true rôle, which is to bring to us the côrtege of external nature, and to associate the splendors of the material creation with the action or the presence of man. Above all let the colorist choose in the harmonies of color those that seem to *conform to his thought.* The predominance of color at the expense of drawing is a usurpation of the relative over the absolute, of fleeting appearance over permanent form, of physical impression over the empire of the soul. As literature tends to its decadence, when images are elevated above ideas, so art grows material and inevitably declines when the mind that draws is conquered by the sensation that colors, when, in a word, the orchestra, instead of accompanying the song, becomes the whole poem.

XIV.

THE CHARACTER OF TOUCH, THAT IS THE QUALITY OF THE MATERIAL EXECUTION, IS THE PAINTER'S LAST MEANS OF EXPRESSION.

TOUCH is in painting what calligraphy is in writing. Certain delicate observers have thought it possible to discover the moral physiognomy of a person from his handwriting. Doubtless they go too far, but we cannot deny that there is a secret relation between the hand that guides the pen and the mind that guides the hand. Insipid as are the flourishes our writing-masters multiply without reason, in which they envelope their capitals and roll up their tail pieces, or the ambitious spirals that pretend even to model the human figure, yet it is curious to follow, in the manuscript of a writer, the gait of his pen and to recognize in his march, timid or resolute, careful or negligent, embarrassed or precise, something that resembles the accent of a personality.

Open a book; it seems at first as if nothing human could be hidden under the form of those letters that a machine has printed. Nevertheless by the choice, the arrangement of these types which the admirable correctness of language calls *characters*, you

will, at the first look, be informed of the nature of the book, you will foresee if it is grave or trivial, familiar or imposing, and, according to the changes of type upon the same page, you will distinguish the places where the tone of the discourse has changed, simply by noticing the passages the printer has put in smaller type, as if to make the author speak in a lower tone. These delicate shades were formerly marked in our language by the noblest, liveliest expressions. A work of lofty wisdom was printed in *Philosophy*-small pica. For another they chose *Saint Augustine*, which awoke austere memories and seemed to refer to the Jansenism of thought. The *Cicero* denoted a grave type that was elegantly lengthened in books of poetry; the *Gaillarde* was a light letter that in name as in fact marvellously suits the pages of current literature — thus the human soul has its part in the expressive vocabulary that in our days has been superseded by a mute and inert numeration.

Touch is the hand-writing of the painter, the stroke of his mind. Nevertheless what it ought to reveal to us is not so much the personal character of the master as the character of his work; for the touch is conditioned by essence; it has its varying conventionalities, its relative truths and beauties. It is a quality that in the history of painting always comes last. The greatest artists of the Renaissance have generally disdained it. Michael Angelo painted the "Last Judgment" with as much care and deli-

cacy as if it had been an easel picture. Raphael executed the frescoes of the Heliodorus and the Attila almost as he did those of the Parnassus and the School of Athens. Leonardo da Vinci treated all his pictures with equal touch, smooth and melting. Titian himself made little difference, and only in the "Peter Martyr" and the "Assumption" he seems led by his subject to accents more animated, more marked than usual. Correggio handled the brush with affection. His execution had as much charm for him as for us and he tasted the pleasure of losing and finding himself in color, but his pencil was always the same, always caressing, sweet, and tender.

It was only in the seventeeth century that the conventionalities of touch were felt and that one thought seriously of varying its characters. Poussin painting "Pyrrhus Saved" or the "Rape of the Sabines" treats his painting with a manly hand and intentional rudeness, while he guides the pencil with more gentleness when he represents Rebecca and her companions. Rubens expresses his feeling with more energy than ever when he puts on the stage the peasants of the "Kermesse," or the furious, breathless hunters of the wild-boar. Ribera writes every muscle with the precision of a surgeon; he runs thick paste over dry tendons; he sculptures all the folds of the skin, hollows all the wrinkles, and heaps up lumps of color upon the unequal asperities of the epidermis. Van Dyck pushes to extremity

the suppleness, the eloquence of touch. With a facile and delicate pencil he spreads the light upon the brow, glides over the contour of the temples, strongly marks the lines of the nose, and resolutely applies the white of the eye or the luminous point of the pupil; but his touch, indicative of the object represented, has hardly any other shades; it remains uniform in presence of the variety of models.

Soon come the mannerists in execution, Jouvenet, Restout, who, after having drawn squarely — it is their word — paint in an angular way; afterwards Boucher, Van Loo, Greuze whose hammered touch makes the surface resemble creasings of paper or bits of marble chipped under the mallet of the sculptor.

Finally in our school, thirty years ago, the romanticists by a legitimate reaction against the soft enamel-like manner of Guérin and Girodet affected an abundance of paint, threw on the color with a trowel, and boast, as a sign of skill, of a hard execution, an execution purposely careless and heightened by successive layers of paint.

Such is an abridgment of the history of touch, and the reader can see what principles flow from it.

The first law of taste in these matters is that the touch ought to be broad in large and delicate in small works. Michael Angelo executed with extreme delicacy the grand "Prophets" of the Sistine Chapel and the terrible figures of the "Last Judgment," but it is an example not to be imitated now because

genius has prerogatives that belong to it alone, and because it is not allowable to go back to those first ages of painting in which art, young and strong, disdained secondary means and ignored the last decoration of form, which is touch.

So it would be shocking to see a small genre picture like those of Terburg or Metsu treated with negligence or want of delicacy. If the mind has little to do in the lower regions of painting, we must at least find there the mind of the pencil. What interest can an old housewife, scouring a kettle or preparing a meal, offer if the vulgarity of the subject is not redeemed by the spirituelle accentuation of each detail, if the beholder is not amused for a moment by the treatment that allows him to touch with the finger the changing down of the duck that is being plucked, or the fur of the hare that is being skinned, the white freshness of an oyster on the shell, the velvety skin of a peach, the warty zest of a lemon — and as the varied aspect of these surfaces, their savor, can only be expressed by touch, the correctness of color not sufficing, a certain address of the pencil, appropriate to the nature of each substance, is demanded.

Nevertheless if great works should be broadly painted, boldness of execution ought not to be pushed to insolence, as Tintoret and some other Venetians imitating him have often done. It is only in stage decoration that the brush can be handled like a broom. The overloaded, hasty, negligent

manner had its admirers at the commencement of the decadence, but the indifference of posterity has condemned these coarse painters. Veronese is a model of the way in which breadth of treatment may be reconciled with respect for detail.

On the other hand easel-pictures may be delicately handled without losing a certain apparent liberty by means of which the labor they have cost is concealed. Metsu is a good master to study. Instead of being melted and porcelain-like, like Miéris, his touch preserves accents full of spirit; it indicates in a head, even if very small, the flat lines of the mouth, the cartilage of the nose, the corner of the eye, and those lights that give play to the countenance. Metsu teaches us what to understand by "finished," in a small picture. To finish is to animate by some expressive touches that give an air of frankness and liberty. To finish is to remove by a few light, elegant strokes of the brush the insipid neatness, the uniformity that communicates to the spectator the ennui it must have caused the painter. To finish is to characterize a distance, to shade a contour, to give to the essential objects of the picture, for instance to the expression of the face or the hand, that last accent which is life.

That the touch ought to be varied especially in works of small or average size, according to the character of the objects, is a thing of course; yet how many painters, even those eminent for practical skill, have failed in this conventionality. Look at one of

Greuze's young girls, weeping over a broken pitcher or a dead bird; beside the fine, delicate, transparent, satiny flesh, the chemise is rendered by a pencil that does not give even the idea of linen or gives an idea so gross as to shock. Gauze even, instead of being expressed by varnish, is often indicated by thick, dirty paint.

Teniers, on the contrary, admirably accommodates his touch to the physiognomy of each object. Without the least difficulty, and as if in sport, he recognizes and characterizes the flesh tints; here the fresh, thin skin of a young farm girl, there the rough skin of an old fiddler with a warty nose. He throws a ray of light over the ivory of a clarionette, or a brilliant point upon a shining stone pot. He affirms with resolution and a generous laying on of paint the enlightened part of a cuirass, or caresses with sweetness the reflections of a wash-basin. The solidity of a wall, the lightness of the pack hooked to the shutter, the hair of a saddle, the buckle of a leather strap, the silkiness of long hair, the brush of short hair, the soft look of the slate upon which the dirty wench has marked the scot of the tap-room; all is expressed with marvellous correctness, seasoned by a thought of malice or irony.

But the touch of Teniers, who in this regard may be considered the painter, par excellence, is not only varied; it is unequal, because the master insists upon the objects represented only in proportion to their importance and also because his hand is continually

guided by the sentiment of perspective. If he paints the hoops of a cask, he follows its circular form; if he paints the flying sides of the table, his pencil instinctively directs itself towards the point of sight. Vivid and thick upon the light parts of objects placed upon the level of the frame, his paste becomes lighter, thinner, more melting when it represents the distant parts of the picture if it is a landscape, or the depths of the back-chamber if it is a tap-room, and the touch less and less decided, softened and breathed upon indicates the presence of air. The more the atmosphere is thickened by distance, the more the color is thinned, to indicate by its transparency and *vagueness*, the successive layers of it. The touch makes aerial perspective visible after the drawing has traced the linear perspective. It designates what is near and what is afar off, and thus destroys the idea of a level surface to substitute the illusions of space. Velasquez is a superior master for the expression of ambient air, and Claude Lorraine has carried it to magic in his enchanting landscapes. His frame is like a window opening sometimes upon the boundless level of a calm sea in which the sun is sinking, sometimes upon a smiling valley that extends out of sight.

But outside of these conventionalities which require that the handling of the pencil shall be varied, the touch of the painter will always be good if it is natural, that is according to his heart. An orator who should seek to imitate the voice of another

would be no more ridiculous than the painter affecting a manner not his own. Ribera is coarse, but his coarseness does not displease because it is sincere. Rembrandt has a mysterious palette, because he has a genius dreamy and profound. Velasquez is frank, because his pencil is guided by the muse of truth. The touch of Poussin is like his character, manly, noble, and expressively simple. Rubens handled the brush with the nerve and warmth that animated him, he is fascinating because his temperament fascinates him. Prud'hon, amorous and sad poet, chose a soft, sweet execution that lulled lines to sleep, tranquillized shadows and let nature appear only through a veil of love and poetry. There are a hundred manners of painting well, but it is none the less true that the practice of the pencil ought never to fall into the cold daintiness of Mignard, nor the insipidity of a Carlo Dolci or a Van der Werff, nor the glassy polish of a Girodet, nor the minute and sterile manner of a Denner.

XV.

CERTAIN CONVENTIONALITIES OF PAINTING VARY AND MUST VARY ACCORDING TO THE CHARACTER OF THE WORK AND THE NATURE OF THE SURFACE THE ARTIST HAS TO COVER.

THE painter may work for the selfish enjoyment of one man or for the pleasure of a whole people. But in proportion as his work is ennobled by the number of people who will enjoy it, the surfaces upon which he should exercise his genius become vaster and more solid, and a proof of the dignity to which he elevates himself is the necessity of painting upon the walls of an indestructible monument, and thus to link his destiny to that of architecture.

Mural painting, that which decorates large edifices, is the loftiest field for the artist, for in promising long duration it demands a work that shall be worthy of it.

What will be, of all the modes of painting, the most suitable to the decoration of buildings? Let us examine the different methods with reference to their sentiment and to the material employed; fresco, wax, distemper, oil, pastel, guache, enamel, miniature, glass, and encaustic painting.

Fresco Painting. This is so called because executed with water colors upon *fresh* plaster. This plaster, made of slacked lime and fine sand, is applied upon a coating rough enough to make it adhere to it. The fresco needs a wall free from materials tinctured with saltpetre, and the colors must be such as the lime does not change. When the artist has polished and made very smooth the surface to be painted, he traces upon it the previously prepared composition. The designs, of the size of the picture, are called cartoons, because prepared upon large sheets of paper glued together. Upon the damp wall the drawing is traced with a point of ivory or wood, or the contour of the drawing is pricked with a pin and a tampon dipped in charcoal or red powder passed along the line of the holes which fixes the design on the plaster. Afterwards the artist follows the tracing with a sharp-pointed pencil or stylus, and this indelible contour is called the *nail of the fresco.* We find it in several Pompeian paintings executed upon a mortar of lime and sand, and as it could only have been done upon lime still damp it is evident these paintings are frescoes.

The tracing made, the artist must write his thought with a sure, prompt hand, without hesitation, without change of purpose. "As long as the plaster is fresh," says Gruyer ("Essai sur les fresques de Raphael"), "the carbonate of lime takes up the coloring matter, envelopes it, forms upon its surface a true crystallization like a varnish perfectly translu-

cent and without sensible thickness, which protects the fresco from all external causes of destruction. The painting thus made upon a properly prepared wall is the most solid, the most beautiful imaginable. It is unchangeable and resists the extremes of temperature as well as the influence of humidity."

When the plaster becomes dry it can no longer fix and protect the color. The artist can return to his work only by painting over the first layers. But these touches must be made with colors in distemper, that is diluted with liquid glue, which, not absorbed by the mortar, have not the same durability as frescoes. These retouches in distemper Vasari declares contemptible, *cosa vilissima.* But the greatest masters have not disdained such retouches. Another method is to go over the fresco, when the plaster is dry, with colored crayons. But time reduces these crayon strokes to powder and the fresco becomes what it was at first. Moliére has very well said: —

> "Avec elle, il n'est point de retour à tenter
> Et tout au premier coup se doit exécuter."

It is then an exaggeration to call fresco "the most beautiful painting imaginable." It is certain it is limited in its means; it admits only natural earths, mineral colors being changed by the lime; it does not lend itself to the delicacies of imitation, does not admit brilliancy and magnificence of coloring. But in the decoration of a Christian temple the fault of fresco becomes a title to admiration. Its pale colors

have something grave and religious, and assimilating itself to the monument it borrows its tranquil strength, its imposing solidity. The figures, instead of being added like an external decoration, seem to be incorporated in the stone and the human feeling to have penetrated the walls of the edifice.

Nevertheless if some great masters prefer fresco on account of its austere charms and its historic celebrity, others prefer different methods.

Wax Painting. This consists in the use of oil colors diluted, at the moment of putting on, with liquid wax mixed with essential oil, but without the intervention of fire, that is without *encaustic.* The advantage of this manner, is preserving the painting from the alternation of shadows and bright spots that in oil painting are scarcely corrected by the varnish that generalizes the gloss. The use of wax not only gives to the whole a soft and uniform aspect which allows the spectator to see the picture well wherever he may be placed, but it resembles the fresco with less lightness, less limpidness of tone.

The greater number of our wall painters at the present time use wax because they can retouch their work indefinitely and can use more brilliant colors. Far from being restrained by the presence of the stone, they seek to suppress even the appearance of it, they would make the walls diaphanous and show us a higher world, a heaven more beautiful than ours, figures poetized by the colors of the prism, and blended in an exalted harmony.

Painting in Distemper. Wall painting accommodates itself equally to distemper; it is perhaps the oldest of all methods. The colors are steeped in glue; a glue made of shreds of the skin, snout, and feet of goats, as described by Cennini, or with the yolk of egg, "*rosso di uovo*," says Vasari, "diluted with vinegar to prevent putrefaction, and mixed with the milk of the fig tree."

Richer than fresco, distemper permits the use of mineral colors. It is applied to walls after covering them with smooth, fine plaster. The painter uses bright, strong tints in anticipation of the fading they will undergo in drying. Before oil painting was perfected by Van Eyck and taught in Italy by Antonello da Messina, the Italian painters used distemper upon walls, wood, and canvas. It sufficed to Mantegna, Giovanni Bellini, and Perugino to make *chefs d'œuvre* as durable as frescoes. Mantegna's "Triumph of Julius Cæsar" was thus painted, and the magnificent picture of Bellini (the "Virgin surrounded by Saints") that was in the church of San Giovanni e Paolo at Venice. Less liable to grow brown than oil painting, tempera has almost as much consistency with less heaviness. Memling used tempera with egg when he painted the famous shrine of St. Ursula in the hospital at Bruges.

Fresco, tempera, and wax then are preferable for wall painting; by this we mean not only the decoration of walls but that of cupolas and ceilings.

CEILINGS AND CUPOLAS.

At first thought it seems ridiculous that fabulous or historical scenes should be represented upon flat or vaulted surfaces above our heads. It is absurd that in a place where we could only see the sky the painter should show us, for instance, the shady paths of Versailles and Louis Quatorze walking with Madame de Montespan to whom Puget is presenting marble statues of frightful weight. To paint figures that, without being sustained by wings, shall eternally keep a horizontal position, is a license that would seem shocking; the more that the spectator is obliged to dislocate the neck to look at a picture that he would see much better on the wall, and which has verisimilitude only when placed vertically. The Italians have finely criticized the painting of ceilings, by placing in the middle of rooms decorated with them, tables in which mirrors are framed, in which the visitor sees below him what is painted above.

The only object that can decorate a ceiling without shocking conventionalism, is a sky with flying figures; but here a new difficulty presents itself, before which the great masters, with the exception of Correggio, were arrested. Figures in the air borne by their wings or upon clouds, can scarcely be seen except foreshortened, and if the figures are numerous, the foreshortening, by their variety, becomes bizarre even to extravagance. That happens when the artist has *plafonned* his figures, that is

represented them seen from below upward. One seems to touch his knees with his chin, another has the hips coming out of his shoulder-blades. At the palace of Té in Mantua certain mythological figures are represented in a manner almost grotesque. Here the horses of the Sun threaten to fall on the spectator, dragging the god of poetry, who shows his prose side. There a Neptune seems cravatted with the muscles of the breast, so that the forms, under the pretext of obeying rigorously the laws of perspective, undergo deviations the most monstrous, the most offensive to the sight.



NEPTUNE. BY GIULIO ROMANO.
(Palace of Té, Mantua.)

Michael Angelo, to whom it would have been but play to draw the boldest foreshortenings, painted the

ceiling of the Sistine Chapel as he would have painted a wall divided into compartments and Raphael did the same in the soffit of the Farnesina, representing the banquet of the gods like tapestry surrounded by a border, fixed to the ceiling by nails.

Must we proscribe the painting of cupolas? No. The cupola is an imitation of the vault of heaven, and there is poetry in the idea of an open sky, a diaphanous dome that gives to the lifted eye of the believer a glimpse of paradise. But these aerial spectacles, separated from us by some distance, should be still more by aerial perspective, which, enfeebling the shadows, veiling the lights, lends to the celestial figures an indecision, a happy vagueness. Too much vigor in the contrasts would wound instead of charming the eye, and the spectator might fear to see fall upon his head or upon the pavement of the church, groups that by the animated play of the lights and shadows would too strongly detach themselves from each other. In the whole, especially in the figures that have no apparent support on the cornices, there must be the blond tints whose lightness reassures the eye.

An excellent judge of art, Henri Delaborde, has said upon this subject in his "Melanges sur l'Art Contemporain," "In decorating with frescoes the chapel of San Giovanni at Parma the pencil of Correggio made through the walls an immense opening to the sky, and thus apparently suppressed the very

field upon which he was working. Bolder than Michael Angelo, who, painting the ceiling of the Sistine, figured upon the solid surface only symmetrical apertures framed in the ornaments of a simulated architecture, Correggio was not afraid to annihilate the real architecture, and to suspend in the bosom of this limitless space groups with irregular lines, infinitely multiplied and rolled over one another according to the most difficult laws of vertical perspective."

But instead of making holes throughout the whole extent of vaults that are to be covered with luminous tints and show us glimpses of the sky, this writer thinks it would be better to pierce the cupola only at intervals marked by the ribs of the building without making the architecture seem to crumble away to give place to a capricious image of what we suppose passing without.

Oil Painting. When we look at certain pictures of Perugino, of the Vivarinis, John Bellini, Mantegna and those of the Florentines of the fifteenth century, Masaccio, Filippino Lippi, Angelico da Fiesole, we ask if oil painting were really a progress, and if we should prefer a method that changes the colors, tarnishes, blackens them, and that seems condemned to an eternal dimness, to the temperas that still are so fresh, so transparent, so pure. It is remarkable that the older pictures are the better they are preserved. "Antique paintings," says Lanzi, "in-

sult modern paintings by their preservation." Almost all the master-pieces in oil are threatened with destruction. If the pictures of Van Eyck, the reputed inventor of oil-painting, are still brilliant with youth and seem unchangeable, it is not because he mixed his colors with the oil of flax, but in spite of this mixture, and because of the excellence of the varnish he combined with his oil, which has given his works the look of enamel.

The Baron Taubenhein wrote in the last century ("De la Peinture à l'huile-cire"), "The oily particles with which the picture is loaded, drying, leave their cells by evaporation. Reaching the surface they encounter a pellicle formed by the parts already dry, or an impenetrable varnish that prevents the evaporation, and all these oily particles arrested in their desertion on the frontiers of color, form a mass of grease that gradually condenses and embrowns the picture."

Independent of the continual change of modern works, and without reckoning the changes that metallic colors like cinnabar undergo in their combination with oil, painters know how irritating is the presence of the *embus*, that is to say, those dull particles that here and there make a spot in consequence of the unequal drying of the oil; they know what a restraint upon their inspiration is the necessity of waiting weeks till the sketch is sufficiently dried to be resumed; they know they must pay dearly for the privilege inherent in the painting they

have learned, and which consists in allowing vigorous browns, profound shadows, more energy in the relief, and at the same time more mystery in the whole.[1]

Rub down the shadows, thicken the lights, is the precept taught in the schools and that Rubens, Teniers, Van Dyck, have charmingly practised, but it is only a relative truth. To paint shadows lightly with thin layers of color diluted in oil, is a good method, if one works upon a canvas prepared with glue, very dry, consequently very clear. If on the contrary it is prepared with oil, one cannot glaze the shadows, because the oil used in the preparation will show through the glaze, and will make the shadows so much the darker, as, in glazing, oil will have been added to oil. In such a case it is better to thicken the shadows in the sketch, which will hinder their blackening, by stifling the foundation that will disappear under the thickness of the paint.

Veronese, who painted on canvas prepared with water-colors, could glaze the shadows; but one who

[1] Few painters now-a-days think of the duration of their works, and consider the quality of the substances they employ. As an exception we may mention Meissonier for the scrupulous care he takes in the choice and purity of his materials. He has kept exposed at the windows for years bottles of oil preserved from the dust, but accessible to the air, and which, under the influence of the sun, have lost their coloring particles and become as clear as water, at the same time have acquired more mucilage and turned to honey. He grinds, purifies, tries his colors himself; thus his little pictures, independent of their other merits, which are of the first order, do not change, and promise to maintain themselves in a state of perfect preservation.

works upon canvas prepared with oil will do well to cover even the shadows with colors thick enough to interrupt the communication of the foundation with the surface. It is always necessary to load the colors in the light portions more than in the shadows, because the granules catching the sunbeams in their passage, add a natural to the artificial light.

Pastel Painting. This is a painting with *pastes* of different colors put on dry, and soft enough to be powdered under the finger. A colorist who wishes to catch fugitive tints, a painter who desires to assure himself promptly of a certain effect, uses pastel, because it demands no preparation, lends itself to improvisation, and may be interrupted and resumed at pleasure.

But pastel is not merely an auxiliary means; some excellent painters have made it a thing apart, and have used it successfully in portraiture.

Applied to paper glued upon canvas, the pastel produces soft, opaque shadows; it has not the depth of oil painting, neither has it its shining spots that reflect the light like a mirror. The freshness of colors, the brilliancy and tenderness of flesh-tints, the down of the skin, the velvety appearance of fruit, cannot be better rendered than by these crayons of a thousand shades that can be placed together in vivid contrast or blended with the little finger, and whose heaping up of layers grasps the light. The pastel is suitable only for the portrait, landscape, or

still life. But the grace of pastel is also its defect — to be friable and to fall in dust. In the eighteenth century La Tour and Loriot invented an ingenious way of remedying this defect — throwing upon the pastel in the form of rain a composition of fish glue and spirits of wine. The experiment was successfully performed before the Academy of Painting. But it is to be feared that in giving it solidity and durability, we should take from it the exquisite dust, that flower of youth, so to say, that makes its fleeting delicacy, but also its charm, its value.

Enamel Painting. Enamel is a vitreous substance colored by metallic oxides; is composed of two substances, the colorless, vitreous body, and the oxides that give it color. The enamel is opaque or transparent; to make it opaque a certain quantity of oxide of brass is added to the vitreous mass. By the action of fire the enamel is fixed to the object it covers. It may be metallic, copper, gold, silver; or non-metallic, porcelain, faïence, brick, stone, lava.

When applied to non-metallic bodies, the enamel is called varnish. Of whatever the paste may be, it is capable of receiving colors that must be taken from the mineral kingdom to remain indestructible in the fire, and which, mingled with vitreous powder, melt, uniting with and fixing themselves upon the surface of the faïence, porcelain, or lava. It often happens that the baking changes the colors. The enamel painter must anticipate what they will be upon com-

ing out of the fire, not to speak of the thousand accidents that may happen in the course of the work. The care, the necessary prudence, are of a nature to chill the imagination of the artist; so enamel painting is only used for copies, particularly if one works upon plates of porcelain. Its most brilliant and valuable use is to decorate vases. "Enamel painting," says Dussieux ("Recherches sur l'Histoire de l'Émail"), can resist the action of the air, the water, heat, cold, dampness, dust, all the destructive agents of oil painting; thus enamel applied on a grand scale to the preservation of master-pieces, would offer inestimable advantages." These advantages enamel painting possesses to-day, thanks to the discoveries made thirty years ago by an artist industrious to the point of genius, Mortelèque.

Before him enamel painting, which unites brilliancy to imperishable solidity, could be used only upon porcelain plates of small size, and with difficulty made straight and smooth; he thought of enamelling and painting with vitrifiable colors great slabs of volcanic lava, that could be smoothed and adjusted to one another with extreme precision, so as to form immense surfaces perfectly plane and continuous. Before him the painter had no white capable of being mixed with the other colors and of producing, by modifying them all, the scale of luminous tones; he was constrained to use the white of the foundation, to *reserve* it, as they say; he could not pile on his colors, superpose them, put a clear tone

upon the brown, and this restraint rendered his labor slow and painful. Mortelèque invented a white, similar in effect to that which is used in oil painting, and which allows the artist to treat at his will the luminous parts of a picture, without having to manage the white foundation. The plates of lava or porcelain became then like canvases, upon which one could henceforth paint freely and boldly.

Let us add that the palette of the painter upon lava, although deprived of cinnabar and vermilion, which are replaced by reds less vivid and of different values, is richer than the palette of the oil painter. "The colors," says Jollivet ("Peinture en Émail sur Lave"), "are mixed with porphyrized glass, which does not change their brilliancy. When they are exposed to fire, the powdered glass liquifies, envelopes the molecules of the colors, and fixes them upon the enamel. Before having been subjected to the action of fire, the work has the appearance of a fresco painting. In this state it can be retouched with impunity." Subjected to two or three fires, and, at need, to a fourth baking, the picture may be led gradually from the preparations of the sketch to the last perfection.

Thus new horizons were opened to monumental painting, and we may hope that in future the walls of temples and public buildings will be covered with vitrified paintings, brilliant and forever unchangeable.

This discovery rendering useless the enormous

labor and expense of mosaic, will enable us by means of imperishable imitations to preserve the masterpieces of art that are perishing; the Sistine Chapel, the "Last Supper," the Stanze of Raphael, the pictures of Titian, the frescoes of Correggio.

If the art of enamelling pottery is almost as old as the first earthen vases, if for ages it was known to the Chinese, the Egyptians; if the Phœnicians transmitted it to Greece; if that artistic people made designs of incomparable elegance with filigranes of colored glass, arranged in mosaics and soldered in the fire, it seems certain that enamel painting upon metals is a modern invention, dating no farther back than the fifteenth century. This proceeding, which consists in painting with fusible and indestructible colors upon metal covered with a coating of enamel, as one would paint upon canvas or wood, was invented, or at least rediscovered at Limoges in France.

Enamel painting upon metal has decided advantages. The colors melt with the first enamel, penetrating it enough to give the picture a beautiful transparency, and at the same time an impermeable varnish, that protects it better than a covering of glass. Upon porcelain the colors melt together, but do not fuse with the enamel, and the effect is heavier, more opaque.

Guaches and Aquarelles. In guache painting the colors are ground in water and diluted with gum-

water mixed with white. Guache is useful to store up souvenirs of a landscape, to note the local colors of the ground, of rocks, sky, etc. It is particularly useful for stage decorations, and the sketches of large compositions, has much freshness and transparency, and does not exclude force of tone, is an expeditious and convenient kind of painting, because one requires only brushes, a loaded palette, and a glass of water, but the colors dry so quickly it is difficult to blend them; hence landscapes in guache have a dry, flat look, in which the skies seem cut up, the greens crude, the yellows and reds hard.

To prevent the too rapid drying of the water, artists have mixed with the gum some glutinous substance, like the milk of the fig tree, jujube paste, the yolk of egg; thus guache becomes distemper, of which it is a variety. In the hands of a skillful painter it is not without sweetness and harmony.

A gauche painting may have a colored background, and the lights are put on in successive layers, that is to say, the painter covers the whole surface of the picture, while in the aquarelle the artist, working upon a white ground, reserves this white for the lights of the picture, and instead of putting on the colors in successive layers, he washes them. The aquarelle is often called a *lavis*, though the word is applied especially to monochrome aquarelles made with India ink or sepia.

If tints diluted with gum-water want body and consistency, they are nevertheless light, cheerful, and

transparent. Literally the aquarelle is only a colored drawing, but in our days the English school has given it a solidity that makes of it almost a new kind of painting. Its colorations have body at the same time that its distances are melting and luminous. It is at once limpid and robust; has much relief and much atmosphere.

Miniature. This word was also written *mignature*, because it was supposed to come from the old word mignard, mignon. It is in truth a kind of painting that is always mignon, elegant and delicate; sometimes mignard, tender, sweet. Although one can paint in miniature in many ways, with egg, glue, oil, enamel, — proved by the many beautiful works executed in France and Italy in the sixteenth and seventeenth centuries, — yet it has been agreed to call a miniature a water-color upon vellum or ivory. Nevertheless, the delicate paintings upon vellum or parchment that so richly ornamented the middle-age manuscripts, were rather guaches, because soft colors were used, and the flesh-tints heightened with white; while miniatures upon ivory are real aquarelles because the white of the background is preserved. These paintings constituted in France an art, that as early as the beginning of the fourteenth century, when Dante came to Paris, was called *illumination*. That this art was known to the ancient Romans, and flourished in the time of Augustus, is certain, but we are permitted to believe that the most skillful illumi-

nators were those of our own country. It was among the first hermits of the Thebaïd and Syria, in the fourth century, that the taste for books revived, and with it the desire of ornamenting them. The greater their voluntary poverty, the greater luxury the cenobites displayed in their copies of the holy books. They wrote the verses in letters of gold upon purple-tinted parchment. Then came the Greek monks, who, painting in miniature upon golden backgrounds, represented in them fantastic animals and ornaments borrowed from their Byzantine architecture. To finish the ornamentation of the sacred text, they framed it with a running vine, and created the art of the *vignette.*

Once in possession of this art our French miniaturists wrought wonders. Abandoning bizarre fancies to draw near to nature, they looked through the windows of the sanctuary and painted upon the parchment of their manuscripts the flowers and plants of their garden, the fruits of their trellis, the crawling or flying insects, and the real living animals of creation. Some illuminators, like Jehan Fouquet, ornamented with small pictures the books of prayers and the Greek and Latin classics, and they have left in them models of invention and naturalness; sometimes even, in spite of their diminutiveness, a sentiment of grandeur.

If art were a simple imitation of the true, every representation in miniature would be proscribed, because it implies a contradiction between the distance

that the smallness of the image supposes, and the careful finish that destroys the idea of this distance. As soon as an object is represented in miniature, I can see it only by drawing it near my eye; but seeing it near I ought to see it clearly, for indecision would be absurd in an object near the eye. On the other hand, as it is only perspective that lessens objects, everything smaller than nature is deemed afar off. There is then a manifest contradiction in the art of the miniaturist, since by the precision of forms he draws near what by its diminutive size seems distant.

Happily, art is something besides imitation of the real; it is a beautiful fiction that gives us the mirage of truth, upon condition that our soul shall be the accomplice of the falsehood.

It is an error then to suppose that the miniature painter ought to treat his little figures as if they were sunk in the picture, separated from us by successive layers of atmosphere, and that he ought to make them seem afar off by means of light and aerial colors. Nothing would be more insipid than a vaporous execution that should allow what we hold in our hands to vanish from our eyes. It is with miniatures almost as with engraved stones. Taste counsels happy trickeries, that strongly interest us in essential features, leaving the rest out of sight. Upon the ivory of the miniaturist, as well as the intaglio or cameo of the engraver, art ought to express much with little. Since the artist must insist upon that upon which expression depends, let him

content himself with putting "in evidence" the great features, and gliding over the rest. Crowded into a small space he will exclude all that is useless, but in compensation will strongly express what is decisive.

Some renowned miniaturists, on the contrary, have worked with a magnifying glass, have in their portraits brought out all the details that nature presents on a grand scale; details one can find again upon their ivories with a magnifying glass. So much minutia produces only characterless works. Accenting everywhere, they do not accent enough where it is necessary.

Painting upon Glass belongs rather to ornamentation than to the art of the painter, as we have defined it.

Encaustic Painting. The word encaustic designates a kind of painting in which the colors, mixed with wax and resin, are softened, melted and fixed by the aid of fire, and afterwards rendered lustrous by rubbing.

Different passages from ancient authors, especially Vitruvius, Pliny, and Philostratus, prove that the most famous painters of Greece executed their works in encaustic. But their method of working is a secret half lost. To rediscover it, researches full of sagacity were made in the last century by the Count de Caylus, but he only invented imperfect means.

In the present century a pupil of David, Paillot de Montabert, has discovered a kind of painting if not similar, at least analogous to that of antiquity.

He has proven that encaustic is not, like oil painting, liable to grow yellow and dark unequally in a way to destroy the chiaro 'scuro of the picture; that it allows portions of the picture to be made soft or transparent, according as one wishes to express what is aerial and remote, or what is near the eye and plainly visible; that it is more suave, richer then tempera and almost as luminous; that, much better than fresco, it lends itself to the delicacies of imitation, that it may be employed for all sorts of pictures, large or small; and that it is excellent to decorate vaulted ceilings or walls exposed to the external air or to dampness; finally, that encaustic is as unchangeable to-day, as it was among the ancient Greeks, when pictures perished only by violent death. The "Battle of Marathon," painted by Polygnotus, was preserved under an open portico at Athens for more than nine hundred years.

Plutarch rendered homage to the long duration of encaustic, when he wrote: "The sight of a beautiful woman leaves in the mind of an indifferent man only an image quickly effaced; such is an aquarelle. In the heart of a lover this image is as it were fixed by the power of fire; it is an encaustic painting; time never effaces it."

XVI.

ALTHOUGH THE DOMAIN OF THE PAINTER IS CO-EXTENSIVE WITH NATURE, THERE EXISTS IN HIS ART A HIERARCHY FOUNDED UPON THE SIGNIFICANCE, RELATIVE OR ABSOLUTE, LOCAL OR UNIVERSAL, OF HIS WORKS.

GRANTING that painting is nothing more than the mirror of life, all its representations cannot be placed in the same rank, because life is so unequally divided among those things that make up the spectacle of creation. The chain that unites all beings is composed of rings, at first simple and rude, which by degrees grow complicated, refined, developed, and in proportion as the chain ascends, become more richly wrought, more precious. It is not then a matter of indifference to represent inorganic bodies in their inertia, or to paint animate beings in movement. Neither is it a matter of indifference to take as a model the plant that vegetates, a captive upon the soil, or the animal that moves, led by a spirit still blind but certain — instinct; much more man, who, the résumé of all anterior creations, crowns them by intelligence, and dominates them because himself free.

Moreover, if the dignity of the painter be measured by the difficulty of his work, what a difference between the copy of a shapeless stone or a plant, and the imitation of a well-proportioned and symmetrical body, eternally submissive to the laws of a divine rhythm, and yet one in which the symmetry is constantly broken by movement and restored by equilibrium. Is art a picture of life? Then nothing can be more interesting than the human figure, since man is the *most alive* of all creatures. Is art the manifestation of the beautiful? The human figure is still the noblest object of its studies, because man is the only creature capable of attaining the highest beauty. Whatever then may be the definition of art, there exist in its works inferior and superior methods according as the objects represented are more or less endowed with life.

This truth may be expressed in another way. The more necessary rigorous imitation is in a picture, the nearer it approaches inferior methods; the more the things to be imitated are susceptible of interpretation, the higher painting will elevate itself.

Let us take some examples. Every day we see in the streets of Paris merchants' signs that strike us by the singular truth of the imitations painted upon them. Sometimes they are hats, sabres, cartridge-boxes that stand out so as to deceive the eye. Sometimes panels of mahogany, oak, or maple, imitated with such perfection as to mislead the cabinet-maker himself. But everybody knows these are the works of an artisan, not an artist.

Now suppose that painters, real artists, Roland de la Porte and Chardin, for instance, are pleased to paint what we call *still life*, that is, cooking utensils, provisions, fruits, furniture; the common things of the interior of a house. Less an artist, and less intelligent than Chardin, Roland will make a table on which he will place perhaps a bowl full of peaches, a cup and saucer, a bottle of brandy, bits of sugar, a tin box of coffee, a water-bottle, bread, plums — the whole well represented, as well as they could be by Chardin.

The latter examining the work of his brother artist, will notice that the utensils and the fruits are put together hap-hazard; that one does not drink brandy out of a cup; nor put peaches near a tin coffee-box — and that the picture instead of being composed of these different elements is overloaded with them. He will not commit such a fault; he will group upon his little canvas better assorted objects, for example, two porcelain cups, a coffee-pot, a sugar-bowl, and a glass of water. These two cups of old Dresden china, forming a *tête-à-tête*, are there like persons in the privacy of home, and seem to keep house as well as the masters themselves. Every one comprehends that the mistress is not far off, and that two beings closely united are to sit down at this table. Something of the pleasant uniformity that characterizes quiet, happy homes, manifests itself to us. Here is a simple picture of still life, that says something to the mind. Apart from the excellence

of the execution, the work of Chardin will be superior to that of Roland de la Porte, because the one will only have imitated nature, while the other, in imitating, will have interpreted her. Roland draws near the workman; Chardin at one step will have passed over the space that separates the artisan from the artist.

But in this domain of pure art opened to us by a true painter simply by showing us two china cups, everything is not on the same plane, nor at the same level. Let the models, instead of cups and saucers, be living, intelligent beings, art rises at once to a higher stage; and more difficult, it will also be more valuable.

The Louvre is full of excellent pictures in which we can measure the distance between still-life and a familiar scene, or, as the Dutch say, "a conversation-picture," like the "Music Lesson" of Gaspar Netscher. It is a small panel, upon which we see a young girl seated near a table covered with a rich cloth, playing the violoncello. Dressed in white satin, she is taking a lesson of a music-master who is smitten with her beauty, and who, clothed in brown, is thrown back into the middle distance in a half-tint of shade. The Saint Preux of this Dutch Julia presents a sheet of music to his pupil, and while pointing out with his finger the words of the song, opens his heart. At the moment in which the mute drama is played in a corner of the picture, a little page, who has entered noiselessly, advances, holding

a violin in his hand, interrupts the declaration of the professor, and puts an end to the embarrassment of the pupil. What has happened? Why such animation upon the countenance of the master? That is what the young page seems to ask, incapable of comprehending the sentiments just exchanged between two persons, one very much in love, the other on the point of becoming so.

Is there a man of taste who would not prefer this picture to one of *still-life* that Netscher might have painted with the same talent and a touch as fine, by grouping on the table-cover the violoncello, the violin, the bow, the sheets of music, and perhaps the teacher's forgotten hat?

If painting can elevate itself thus by the mere substitution of human figures for inanimate objects, what will it become when it chooses its heroes, no longer in common life, but in the world of history or poetry; when, instead of representing local manners, it represents the customs of humanity, and its heroic characteristics; when it replaces the changing costume of an epoch by that generalization of vestments suitable to all times and all peoples, which drapery is; when seeking beauty of form in its primitive essence and drawing nigh to sculpture, it conceives and creates those immortal types that are gods! We see there is a wide interval between Netscher and Raphael, between Chardin and Michael Angelo. To go over this interval as an observer, is to explore the entire domain of art, landscape, sea-

views, animals, battles, conversation-pictures and familiar scenes, that properly speaking are genre pictures; finally history, fable, poetry, allegory.

However diverse these kinds of painting, they cannot be the basis of a complicated classification. It would falsify philosophy to find divisions where there are only shades and varieties. The true distinction, the only one, we believe, to establish, is that of which we have spoken — the difference between imitation and style.

XVII.

THE DIFFERENT KINDS OF PAINTING BELONG TO THE LOWER OR HIGHER METHOD, ACCORDING AS IMITATION OR STYLE PLAYS IN THEM THE PRINCIPAL RÔLE.

IF the reader recalls our definition of style, he will perceive that the objects embraced by painting are all susceptible of imitation, but not all of style.

Style being typical truth, exists only for beings endowed with organic and animal life. The mind conceives a type of the horse or the lion, because the organism of the horse and the lion follow a constant law; but it is impossible to conceive the type of a rock or a cloud. Why? Because those bodies not being living are not organized; not being organized they have no proportion. How, then, discover the normal form of that which is without form? How seize the fixed rule of that which is irregular? How find a perfect proportion where there exist only variable dimensions? When I see the head or leg of a horse, I can reconstruct the entire animal by virtue of the fixed relation of the parts to the whole; but the half of a stone being given, I cannot know the form of the other half, because no known principle has governed the aggregation of its molecules.

Even the creations of the vegetable kingdom, for the most part, elude a common measure; they have no standard, although we notice repetitions, alternations, that indicate a beginning of regularity and order, a sketch of life. Who can draw the typical form of a fruit or a vegetable? Who can fix the type of the orange or turnip? Admitting that the painter could do this, he would have only a frozen image, without interest, without savor. For one orange to represent all oranges, it would be necessary to eliminate precisely that which in the painting would give to this fruit singularity and attractiveness, that is, the accidental peculiarities, infinitely varied, which distinguish one orange from another, the roughness or smoothness of the rind, the black spots that have stained its surface, the parasites that gnaw its skin, the shades of pale yellow or of vermilion that announce unequal ripeness, as a part has matured in the sun or in the shade.

These delicate details are the delight of such artists as David de Heem, or Rachel Ruisch. It pleases them to particularize by scrupulous imitation that which, generalized, would become cold and insipid. Have they under the eye a lobster; their touch dwells upon the sharp claws, spins out the antennæ, lingers over each articulation where a bit of soft flesh unprotected by the cuirass may be perceived. Have they a lemon to represent; they will make you taste the oil of the zest that rolls in a spiral under the knife; and how this half-peeled lemon will

make your mouth water when the silver blade passing through the thick, white skin shows you in the cells of the fruit that which will refresh and delight the palate. Do they wish to paint just opened oysters; they will make us touch them with finger and lips; will sharply define the rough edges of the shell, grossly foliated exteriorly, but within delicate, transparent, polished, moist, nacred.

They take pride in painting the drops of water on which the light plays, the pearls "which are," says a poet, "a malady of the oyster, as poetry is a malady of men." Lovingly they observe in every object the curious tones, the delicate shades, the soft and the shining, the smooth and the rough, the dense and the friable. They express at the end of the brush the delicate skin of the plum, its spots, its bloom, and the downy envelope of the nut, and the cuttings in the green skin that imprisons the kernel. They forget neither the butterfly, the worm, the beetle, nor the fly. In a word, they find delight in the imitations that are for an instant to please the eye.

Thus, the value of such a painting is entirely in the treatment. When the objects represented rise in importance, style will find a place.

Landscape. Here still, imitation plays the most important rôle, without, however, being so scrupulous, so literal as it was in a picture of still-life. Let the reality of the landscape be studied in each of the elements that compose it, let one perceive in it the

presence of the air, the distance of the horizon, the lightness of the moving clouds, the depth of the water; let the land be solid, the stones hard, the bark rough, the reeds damp, and the bushes thorny; let the trembling leaves be traversed by the light, hollowed by shadows, recognizable in their variety, by their forms, their movement, — that is indispensable, certainly. The poetry of the fields and forests travels only in company with truth.

But the painter must idealize the real by making it express some sentiment of the human soul, and the proof that faithfulness of imitation does not alone suffice is, that if the instrument of the photographer could seize colors as it does forms, it would give us a certain view of a certain country, but it would not produce a work of art, — a *landscape.*

Look at that hut of Rembrandt's, now celebrated among amateurs under the name of the "Hut of the Big Tree." Had it painted itself on the plate of the camera, instead of being seen by the eye of Rembrandt, we should, perhaps, pay it no attention; certainly we should not find in it the sentiment of rustic liberty and happiness that Rembrandt excites in us after having experienced it himself. Fortunate cabin! What profound peace reigns around it. The city is far, far off; we see it just enough to feel satisfied not to be in it. Before the door two children are busy doing nothing. They are the only living beings near this dwelling, except a cat that watches a company of sparrows and two ducks, one of which



THE HUT OF THE BIG TREE. REMBRANDT.

is plucking its feathers with its head thrust under its wing. One can forget one's self long in contemplation of this sublime disorder, this dilapidated thatch carpeted with plants, and bright with flowers, and this heap of fagots from which we might light up the hearth if we entered to dry our shoes after a promenade through the overflowed meadows. Managed by a painter like Rembrandt, imitation apparently the most naïve charms us with objects that have no relation to our affections. An old cask, a broken wheel, a little wash house under which we hear the croaking frogs, lilies floating on the lazy waters of the canal, aquatic plants so well indicated by the pencil of the artist, and the grand and beautiful linden that gives majesty to a picture so rustic and humble. Inanimate things: but they speak to us a language that enchants us because Rembrandt has put in it something of his own heart.

The spectacles of nature want the essential characteristic of art — unity. Nature not only varies every moment of the day, but in her infinite complexity, her sublime disorder, she contains and manifests to us that which corresponds to the most contradictory emotions. Capable of exciting these emotions in man, she is powerless to express them. He alone can render them clear, visible, by choosing the scattered features lost in the bosom of the real, and eliminating from them what is foreign to or contradictory of his thought.

If Ruysdael paints a landscape, the sky is over-

cast, the wind drives the clouds, whistles through the bushes, sweeps over the fields of grain, and rustles in the leaves of the old oaks. Under his impassioned gaze, everything grows sombre, takes a character of sadness; the brook becomes a torrent, and rolls over the uprooted trees; the sun scarcely pierces the clouds enough to change the characteristics of this savage nature, and the smile of its light adds to the melancholy of the picture. Should the painter meet a sportive farm-girl gayly dressed, he would not see her, and would never introduce her into his landscape, in which we see only far-off, ill-defined figures that enhance its solitude.

Let Berghem paint the same places, the spectator would not recognize them. The sky is serene, the forest peaceful, the water flows gently or sleeps in a pond to which the cattle come to drink, driven by a joyous peasant girl, in gay, fresh colors, mounted on an ass. At night even the scene will be made gay with some drama of light, either peasants kindling a brush-heap to fish for crabs, or by the half-veiled light of the moon, travellers and animals traversing a wooded country, pass through a swampy glade in which their images are reflected.

Thus the artist master of reality enlightens it with his eyes, transfigures it according to his heart, and makes it utter what is not in it — sentiment, and that which it neither possesses nor understands — thought.

But is landscape, already stamped with the imprint



MERCURY AND ARGUS. CLAUDE LORRAINE.

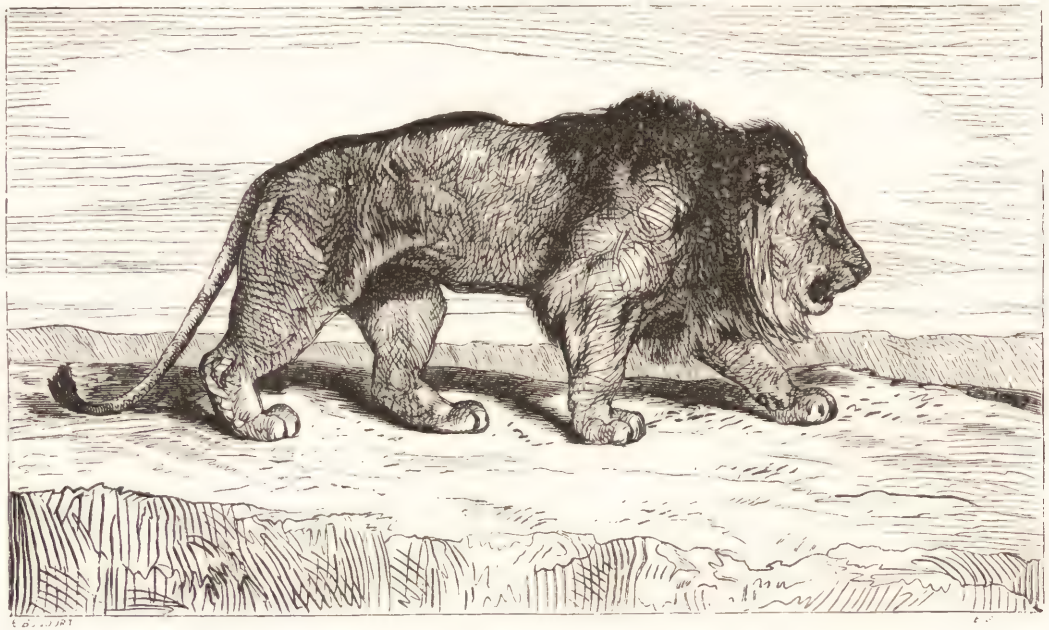
of a personal character, susceptible of being aggrandized by *style?* Two great French painters have affirmed it in a striking manner, Nicholas Poussin and Claude Lorrain. Both, without overstepping the bounds of truth, transport us into countries that their imagination has embellished, and with real elements they compose an ideal whole. Their trees present pleasing forms whose silhouette fills the space but does not rend it; their lines, varied without being fantastic, and contrasted without violence, preserve even in their opposition a solemn breadth and a calmness full of majesty. The buildings with which their landscapes are ornamented, recall ancient times and peoples. Those of Poussin remind of Sicily, Greece, Egypt, so that one is not surprised to see on the shore of the waters that bathe them the pursuit of Galatea, Diogenes throwing away his bowl, or Moses saved by the daughter of Pharaoh.

Those of Claude recall sometimes the Golden Age, those times in which life was a long breath of happiness, when the land of Saturn was inhabited by fauns and nymphs, when cavaliers were centaurs. By a sublime transmigration of soul, Claude recollects having lived among the shepherds of Theocritus, having heard the flute of Pan, and upon his canvas bathed in light, he hollows infinite distances that are not only depths of space, but perspectives of the soul. Sometimes he represents a ruined temple under the shadow of a sacred wood that stretches out till lost on the horizon; sometimes he

paints with astonishing truth an imaginary gulf in which ships, built in the workshops of the ideal, set sail upon long voyages over seas that will never be upheaved by a storm.

No other school has given such grandeur, such poetry to landscape. There is in truth poetry and grandeur in finding in nature the past of history, in transforming the field into an Elysium, in making it the sojourn of the demi-gods; but upon condition of not losing sight of the accents of truth, of not substituting for the characteristics of the fields and forests the factitious representations of an Utopia. Nothing is more contrary to the laws of art than the *historic* or *heroic* landscape reduced to a system. Worth a hundred times more is a bit of ground naïvely treated by Karel Dujardin, a little familiar brook by Van de Velde, or even an oak of Bruandet. The historic landscape is beautiful only when it is sincere, that is to say, when, instead of being the work of a teacher who has not felt what he wishes to express, it emanates from a master who expresses what he has felt.

Animals. When they are the principal object in the painting, animals fall into the list of subjects in which imitation plays the chief rôle. They ought to be simplified and aggrandized by style only when they figure in a fabulous composition or in some august scene in the suite of the gods. They are then considered as emblematic, and to imitate them too



LION. BY BARYE.

closely would be a puerility. When Cybele passes on her car drawn by lions, when the triumphant Bacchus guides his panthers, it is not fitting to render too exactly the fur of these animals, the details of their manes, the spots upon their skins. They should retain something mythical, because such animals being taken as symbols, participate in the divinity they accompany. How much less effective would be a decoration in which the steeds of the sun or of Neptune were introduced, if the artist limited himself to copying them from nature, instead of, like Julio Romano or Polydorus, giving them something supernatural. When they have played a rôle in history, or have been in the service of heroes, animals may receive the imprint of style. When bulls and oxen decorated with garlands are led by the victimarius to the sacrifice, the artist who wishes to put himself in unison with the personages that compose the drama of his picture, will not go to the stable to study them. He will rather draw his inspiration from antique bas-reliefs or engraved stones, because in them animals are represented in a way that lifts them above the trivial, and because, each people having had its own way of regarding and representing them, it is of consequence to catch the spirit of those who were their masters.

There are animals so consecrated by ancient religions and history, that we cannot escape the traditions that have ennobled them. Such are the horse, the lion, the elephant, the tiger, the wild boar, the

stag, the ram, the goat, the eagle, the owl, the ibis, the serpent, the dolphin, the swan, the dove, the tortoise. Aside from the idea evoked by their presence, wild animals are more susceptible of being idealized by style than domestic animals. Those that are always under our eyes, and associated with our everyday life, demand close obervation and imitation. The sheep and cows that were sculptured by Phidias on the frieze of the Parthenon, are rendered with extreme naïvete, while the lions' heads that crown the cyma of the cornice recall a remoter, loftier nature.

If Jean Fyt, and Jean Leducq, are studying the habits of dogs, if Hondecoeter, and Simon de Vlieger are painting the life of the barn-yard, their sole aim is to copy their models faithfully, to be true in the least particulars. Paul Potter himself has no other ambition; he who has the power to charm us by painting cows and sheep at pasture, and who so well knows how, by the language of drawing and color, to make apparent to us the unknown idioms and the hidden poetry of this obscure world, in which these inferior beings live as in a dream.

If the artist amuses himself by painting an ass sauntering in a pasture, as Wouvermans has done, in what way can he interest us other than by details? Having munched his thistles, the donkey has stopped on the brink of a ravine, and seems philosophically occupied in snuffing up the fresh air, and pensively listening to the sound of the water. His bony back and his long ears are vigorously defined against the



COW. BY PAUL POTTER.

clear sky. Involuntarily one draws near the creature and marks the variety of colors on his skin; here black, there grey, yellow in spots, marked with white under the belly in tones delicate, brilliant, silvery. We notice where the hair has been worn off by the rubbing of the bridle, the cicatrized wounds, finally scrutinize the physiognomy of this dreaming animal, and its profound quietude. But let the scene change, let this ass of the fields become the ass of Scripture, stopped in the way by the angel, or bearing Jesus in triumph into Jerusalem. What a stupid fault it would be to insist upon the little details that charmed us a moment ago. In one of the admirable paintings that decorate the choir of St. Germain-des-Prés, Flandrin has given a fine example of the style that transforms the humblest animals when they are associated with divine actions.

One means of heightening imitation in animals is to put into them that fire, dash, fullness of life, that lend to their passions something human, and that Leonardo da Vinci, Rubens, and Sneyders have so well expressed in their battles and hunting-scenes.

Battles and Hunting-scenes have this in common — it is impossible to paint them with other than probable truth. How can one represent in a single instant an action that lasted a whole day? How preserve in a picture the exactitude of strategic movements, the precision of the bulletin, the fidelity of history? The talent of the painter is shown in

choosing the most interesting feature of the action, the most characteristic episode, the decisive moment.

Every painting is subject to the rigorous law of unity. But genius must invent the unity of the battle or the chase, or know how to unravel it from the complications of a long recital. The important thing is to give us a vivid idea of the combat, a memorable impression by striking one grand blow upon the imagination. In his "Battle of Aboukir," Gros happily personifies the two armies, the two races, the two forms of courage, by the choice of a single episode. While Mustapha, thrown from his horse, disarmed, shudders at the abandonment of his soldiers, and with indignant hand strives to retain the fugitives, his son, to save the father's life, picks up his sword and presents it to General Murat, who, as handsome in the mêlée as on parade, stops short his Arab horse, and by an heroic and eloquent gesture, spares the vanquished.

In his sublime "Battle of Eylau," the same painter makes a single figure the résumé of a terrible defeat. In the foreground are groups of dead under the snow, dying disturbed by the noise of the imperial escort, savage enemies whose wounds our surgeons dress in spite of them. Farther off, over a a vast, extended space, we see entire regiments stretched upon the ground, lines of soldiers who maintain their ranks even in death, and others in the ranks awaiting their turn to die. But all these epi-

sodes do not hinder the eye from turning ever to the figure of Napoleon, to that pale face lifted to heaven in search of the vanished star, and which, ceaselessly present to the eye, forms the unity of this great disaster.

Sometimes the unity consists in the absence of a dominant episode; the battle is then the image of two armies that seem to obey the breath of contrary winds, and make of a thousand slaughters one butchery. However, all is not pure invention in such a picture, but what rôle shall be given to imitation or to memory where so many scenes, movements, gestures, attitudes, have lasted but a moment, even supposing the painter engaged in the battle had leisure to see them?

It was permissible to Raphael, to introduce in the "Battle of Constantine," the grand style rendered possible by the action of half-naked figures, and the tournure of antique arms. Such paintings, representing under forms of highest beauty the eternal horrors of war, and under the features of a father lifting the still warm corpse of his son, the eternal sorrows that follow human sacrifices, such paintings, we say, belong to the highest order in the hierarchy of art. So of the "Battles of Alexander," upon which Charles Lebrun has imprinted a character truly epic.

As for the modern battle, with its official truths and its obligatory uniforms, it has only a value of anecdote, because it would be unintelligible if the

painter pretended to develop the plan of the general-in-chief, and to show us the grand manœuvres. Horace Vernet in his pictures, Raffet in his lithographs, have tried to preserve, at least in part, the identity of time and place, and the physiognomy of the combatants. They felt it would be absurd to transfigure military men whom one might meet in the streets of Paris, between two battles, and without hesitating between the insipidity of an allusion and the energy of the truth, they have found it piquant to paint heroism in overcoat and cap, as they deem it just to do homage with the popular chiefs, to the great collective man — the regiment. Unfortunately, such respect for bulletins and reports, gives excessive importance to little truths, to little things, button-holes, straps, epaulettes, gaiter-buttons; the artist cannot forget these details, because, doing so, he would sacrifice the interest, the real value of his work.

Michael Angelo said one day to François de Hollande: "*What painter would be silly enough to prefer the shoe of a man to his foot?*" He thus affirmed the superiority of the nude over the vestment, and necessarily the superiority of drapery over costume. Without being so austere as sculpture, the art of the painter rises in proportion as it frees itself from conventionalities purely conditional and local. Costume varies according to place and time; it is often an affair of caprice or fashion; drapery, on the contrary, is eternal, because it is the

clothing of humanity. The interest of familiar painting is heightened, when to the representation of customs is added the piquancy of costumes, but high art rejects costumes, and admits, willingly, only draped figures.

When Raphael had entirely broken with Gothic usages, and gotten rid of the habit contracted by him under his master Perugino, of dressing the Gospel characters according to the fashion of Florence or Perugia, he learned what grandeur there is in Greek drapery. The mantles that cover the philosophers in the "School of Athens," like those that envelop the "Prophets" of the Sistine Chapel, were not cut by the tailors of Rome, but conceived, adjusted by the supreme taste of Raphael, the free genius of Michael Angelo.

The Venetian School, so charming and so gorgeous in Veronese, so imposing in Titian, is inferior, as a whole, to the Roman and Florentine schools, because it displayed stuffs instead of studying drapery, was pleased with the habiliments of the stage, and with painting satin, taffeta, velvet, brocade, with the sole object of pleasing the eye. By the profusion of their costumes, the Venetians were led to indulge in gaudy colors and ostentatious displays, so brilliantly renewed by Rubens, that lead one, little by little, to neglect sentiments and ideas, to replace the eloquence of art by picturesque phrases.

There is, however, one kind of painting for which drapery is not suitable — the *portrait.*

Here, the truth of imitation would seem to be a quality of the first order, and resemblance by means of clothing a necessity. Nevertheless, portraiture is one of the highest branches of art, and only the greatest artists have excelled in it; in Italy, Titian, Raphael, Leonardo da Vinci, Andrea del Sarto; in Spain, Velasquez; in Germany, Holbein and Albert Dürer; in the Low Countries, Anthony More, Rubens, Van Dyck; in England, Reynolds and Lawrence; in France, Rigaud, Largillière, David, Gérard, Ingres.

If works of art ought to be measured by the degree of intellect they demand, the perfection of the portrait is the last word of painting. In truth, the model that apparently gives the law to the painter, that imposes upon him the peculiarities of his features, the singularity of his coiffure, the cut of his clothes, his habitual carriage, yet leaves him countless liberties. These profoundly personal characteristics, that must be profoundly treated, may be modified in a hundred ways; the ugliness of the face corrected by choosing full-face, three quarters, or profile, lowering, raising, or turning aside the head, adopting a pose that hides what is insignificant and makes prominent what is advantageous, by calling in the aid of light and its charms, shadow and its mysteries.

Can anything be more difficult than to get the expression of intelligent life? But the means of success? Will it be by literal imitation? If that sufficed, the best portrait painter would be the photographer.

But who does not know how deceitful is the truth, that pretends to be infallible, of the photographic image? The painter endowed with mind can call forth the mind of his model, but how can a machine evoke a soul? In presence of the human figure, the photographer, according to the sculptor Préault, gives us only "the soot of the flame."

Before a being who feels and thinks, everything ought to be felt and thought, consequently chosen; the attitude, the physiognomy, the lines of adjustment, the chiaro 'scuro, the color, the accessories, even the relative proportion of the frame which may make the model seem larger or smaller. If the person is of lofty stature, it will be better to narrow the field above the head so that he will seem to touch the ceiling of the picture; if of small size, it will be indicated clearly enough by the distance left between the top of the head and the border.

The attitude is one of the grandest means of expression in the portrait. Much skill is required that the pose may not seem far-fetched, forced, but striking, and, at the same time, natural. By representing Henry VIII. standing and full-face, his cane in his hand, and one arm hanging down, Holbein has been able to manifest with energy the instincts and appetites of this gross man, of this obese and voracious brute, who fills his frame to bursting. This pose displays his round face, small, cruel mouth, narrow, pinched nostrils, swine's eyes, swol-

len temples, and jaws that by their enormous development seem to drag intelligence down into the region of the viscera. Ever since Holbein's time, the English school has shone by the variety of its attitudes. Reynolds displays fine, inventive imagination in the portrait of the celebrated Dr. Johnson. With half-closed eye, anxious brow, hands opening as if about to seize a fleeting thought, he seems plunged in an ecstasy of meditation, and to revolve some great problem in the folds of his mind.

For a century, artists have surpassed their predecessors in exaggerating the exceptional, heightening the accidental, to represent certain strange types, certain temperaments engendered by the crossing of races and the current of new thoughts. In our days, Ingres, in his portrait of Bertin, has, with rare power, indicated the power of his model, merely by the attitude he caught after having observed him for months. Seated, and loaded down by his embonpoint, he places his two hands, turned inwards, upon his wide-apart legs, and with his rounded arms seems to sustain the weight of his corpulency. In this admirable portrait we find the indelible features of an individuality that it would be impossible to confound with any other; it is full of style in its imitation, because its truth is a typical truth, that is to say, it is a personification of the higher bourgeoisie of our times, a class strong, intelligent, and tenacious, disdainful of what is below and above it, and in which the pride of the theorist is mingled with the

positivism of the business-man, and the manifest well-being of fortune acquired by labor. Yet how profoundly individualized is the physiognomy of the original, not only by the questioning expression of



BERTIN. BY INGRES.

the piercing eye, the slight disorder of the hair, the taper fingers of the puffy hands, but even by the folds of the vest and coat, whose optical physiognomy completes the moral physiognomy of the portrait.

The Physiognomy. There is in the individual a general truth that the painter cannot at the first moment divine, for it often happens that a coarse man has a vein of gentleness, and a mild man has fits of violence. Anxious to seize the unity of the character through the accidental or misleading expressions, Van Dyck kept his sitters to dinner, the better to spy out the moment in which their true physiognomy should betray itself, in which the natural, driven away by factitious conventionality, should *return on the gallop.* Holbein had reflected upon that, and looked closely, when he painted that ascetic, mild old man, whose bony hands, crossed one over the other, repeat the leanness and sadness already announced by the withered face, the eyes hollowed by meditation, the sunken cheeks, and thin lips accustomed to silence. The black cap crowded down over the ears, the furred pelisse that covers the shoulders, the table upon which he leans, all aid in showing us a denizen of the North, who lives in the interior of his house and of his thoughts. "Who could help loving," says Paul Mantz, "this grave and gentle face of a thinker who, we are sure, suffered all the disquietudes of the sixteenth century, and who, without having the mocking lip of Erasmus, like him saw the old world end, and the new one begin. These portraits of Holbein are full of ideas. The human has never been rendered so visible under the mask that covers it."

Lines simple or involved, abrupt or blended together, light and shadow, adapted to the tempera-

ment of the individual, coloring vigorous or tender, brilliant or subdued, dress careless or severe, the accessories, the attributes, the background, these diverse elements in the portrait fall within the province of the mind. Each of the great masters has employed them according to the characteristics of



PORTRAIT BY HOLBEIN.

the persons represented, sometimes according to his own genius. Leonardo da Vinci veils in loving half-tints the portrait of "Mona Lisa," the beautiful woman with the reserved, yet provoking smile, the magnetic eye. He envelops her in a harmony of a minor key, that the blending of light and shadow

may correspond to the secret fascination of this countenance, this voluptuous look. Rembrandt throws over the commonest nature a mysterious glimmer that is poetry, the romance of light. Velasquez expresses so perfectly the shade of temperament by the exquisite truth of local tone, that we discover without effort the unison between the visible form and the hidden spirit. Van Dyck and Anthony More give to all their personages the stamp of good breeding, or the investiture of nobility. Rubens exalts life in the image of his model; he seems to throw into it the circulation of the blood, and when it is a child or a woman, he lavishes upon it freshness, youth, and the sun. All Titian's portraits are imposing. Their beauty attracts, at the same time their dignity keeps us at a distance. They are speaking, though silent.

The old distinction between genre and history, or rather between familiar, anecdotic painting and style, is then necessary, profound, and must be maintained. Individual truth suits the one; the other demands a more general, a higher truth. Let Teniers individualize with spirit, and with all the accents of their grotesque deformity, his peasants, whom Louis Quatorze called baboons; let Van Ostade detail the interesting ugliness of his wandering minstrels, of his poor, deformed villagers; let him introduce us, with a sunbeam, into that little "Village School," where twenty charming monkeys have each his own fashion

of pouting at work, and dreaming of the hedge-rows; that is admirable. A charlatan at a fair, a public fête, a game of chess, a familiar conversation, the comedies of the household, the little dramas of private life, demand only justness of observation and talent for imitation. All pretension to style would be unpleasing, out of place.

Very different is the work of the painter, when the person whose biography he relates is the human race. The form, gesture, expression, external nature, the landscape, all are under the control of his thought; he is like one who, melting common worn-out money, stamps it anew and creates with it other species of purer metal, higher value. He knows that in the scales of history, little things are borne down by the weight of great ones. "It matters not," says Reynolds, "if Alexander were short of stature, if Agesilaus were maimed, if Saint Paul were mean in appearance; in the representation of these heroes the painter prefers the resemblance of the mind to that of the body. If, by chance, he has seen a boy hurling a sling, bite his lip, he will not, like Bernin, give to the conqueror of Goliath that trivial and accidental expression, thus disobeying the higher laws of art."

Color, also, has its conventionalities and its dignity, in the eyes of the painter of style. Sometimes, to give more severity, he tempers it or reduces it to the tone of chiaro 'scuro, or, if he finds the harmony too effeminate, he does not fear to break it by sudden

transitions, bold juxtapositions, that move the spectator as would the staccato notes of martial music.

The great artist is not he who enters our house to put on our clothes, to conform to our habits, to speak to us an every-day idiom, and to give us a representation of ourselves; the greatest artist is he who guides us into the region of his own thought, into the palaces or fields of his own imagination, and who there, while speaking to us the language of the gods, while showing us ideal forms and colors, makes us for a moment believe, by force of the truth in his falsehoods, that these regions are those in which we have always lived, these palaces belong to us, these mountains looked down upon our birth; that this language is ours, and these forms, these colors, created by his genius, are the forms and colors of Nature herself.

Engraving.

I.

ENGRAVING IS THE ART OF TRACING IN INTAGLIO UPON METAL, OR IN RELIEF UPON WOOD, A DRAWING FROM WHICH IMPRESSIONS CAN BE TAKEN.



To engrave, is to draw by incision upon a hard body, stone, wood, or metal. This kind of drawing is very ancient; we find many examples of it in Egyptian hieroglyphics, not to speak of the seals that the citizens of Babylon carried upon their persons, and the ring of Ulysses, upon which a dolphin was engraved. We have only to look at the ancient coins to see a type in relief produced by an engraving in intaglio, and a hollowed area produced by an engraving in relief. The art of engraving, then, is not a modern invention, it is only the art of taking impressions upon paper from an engraving upon wood or metal, that is of recent origin. In other words, it is the marriage of engraving with the printing-press.

As there are two kinds of engraving, well defined, in relief and in intaglio, so there are two kinds of im-

pressions. Engraving in relief, which is ordinarily upon wood, and which we call, for that reason, xylographic, is a drawing in which the lights are deeply hollowed, while the shadows and the contour are in relief. To print a wood engraving, ink is passed over the surface so as to blacken only the projecting portions of the wood, and an imprint upon paper is obtained, *a proof*, by pressing the sheet upon the inked surface. Before the invention of printing, this pressure was obtained by means of a brush, still used for wall-papers. Thus the proofs of the "St. Christopher" were made in 1423, which probably are the oldest impressions of wood engraving of undisputed date.

Intaglio, generally upon copper or steel, consists in leaving intact the lighter parts of the drawing, and hollowing in the plate of metal only the contour and the shadows. To print such an engraving, one begins by covering the whole plate with ink; afterwards it is dried with a tampon of linen or the palm of the hand, so as to leave ink only in the cuttings, that is, in the furrows hollowed by the artist. Applying to the plate a damp paper, under heavy pressure, between two cylinders covered with flannel, the paper is crowded to the bottom of the cuttings, where it takes up the ink.

The generic name *prints*, is given to the images obtained upon paper by means of pressure. Although every print may be a proof, and every proof a print, the word is used in a more restricted sense.

It signifies trial, when the engraver, to test his work, prints an impression; and is employed in a relative sense in speaking of one print as compared with another taken from the same plate. We say, for instance, my proof is better than yours. A proof is clear or muddy, according as the plate was well or badly dried; it is gray or pale when the pressure was insufficient, or when the plate, worn at the surface, begins to lose the fullness or precision of its black. In a word, the proof is to the print what the copy is to the book.

If it is true that there exists in Europe no proof from a wood engraving anterior to the "St. Christopher;" if it is true that the date 1418 of the "Virgin surrounded by Saints," in the library at Brussels, may have been changed, the first xylographic print preceded, by thirty years, the first print made from an engraving on metal by a Florentine jeweller, Maso Finiguerra.

Wonderful coincidence! The invention of engraving, which is the printing of the fine arts, was contemporaneous with that of printing, which is the engraving of belles-lettres. The means of popularizing the works of the artist was born at the same time with the means of propagating the thoughts of the poet and the philosopher. In 1452, when Gutenberg and Faust were printing at Mayence their first Latin Bible, the Florentine, Maso Finiguerra, created the first prints, taking impressions from a silver paten he had engraved for the Church of St.

John Baptist, at Florence. It is important to explain how he was led to his discovery, and in what it consisted.

Like all the jewellers of his time, Finiguerra ornamented his works, sword-hilts, caskets, patens, cups, chalices, reliquaries, with patterns engraved in intaglio. These delicate miniature ornaments were called *nielli*, from the Latin word *nigellum*, — black, hence applied to the engravings made by jewellers. When the artist had finished his work, he spread over the



ITALIAN NIELLO.

COLLECTION OF M. EMILE GALICHON.

engraving a black enamel, *niello*, whose composition is carefully described by Benvenuto Cellini, in his treatise upon jewelry. This enamel, filling the cuttings of the engraving, made the design visible in black upon the clear tone of the metal. But as any retouching was impossible after the melted niello had been run into the mould, the jeweller, before proceeding to this last operation, took one or several

impressions with clay, to be able to inspect his work and, if need were, to correct it. Upon the clay the engraving presented itself in relief and reversed; if, for instance, an inscription were traced in the original from right to left it would in the impression run from left to right. Now to see his work as he would have seen it upon the niello-covered plate, the jeweller poured sulphur over the clay, and, after having colored with lamp-black the furrows in the sulphur, he printed a *counter proof* that replaced the engraving in its proper position before his eyes.

This method Finiguerra had employed when he engraved for the church of the Baptist at Florence one of those patens to which the name *paix* was given, because they received the kiss of peace in religious ceremonies. After having taken, with sulphur, two impressions, Finiguerra conceived the idea of printing one upon the silver plate with damp paper that he pressed with a roller, and the proof thus obtained was the first print from an intaglio.

This inestimable relic is preserved in the cabinet of prints at Paris, where it was exhumed in 1797, by the Abbé Zani. Fortune kindly giving to an Italian the discovery of the print, that proves, in spite of German pretension, the Italian origin of printed engraving. Additional information with regard to this curious historic controversy, is furnished by the two proofs in sulphur, printed by Finiguerra, that still exist, one at Genoa in the Durazzo collection, the other in the British Museum.

Nevertheless the invention of Finiguerra, which was such for Europe, was not new in the world. We know from the testimony of the Venetian, Marco Polo, who travelled in China in the thirteenth century, that at that time the Mongolian conquerors had assignats printed upon mulberry-tree paper from copper plates. The Florentine jeweller only found again a secret already known in Eastern Asia, where also from time immemorial they had known how to print stuffs from engravings in relief. But the Florentine discovery was of incalculable importance: first, by multiplying the impressions of an original work the printer spread it through the whole world and insured it a duration that might almost become eternal; and because the delicacy of the engraving, the vigor of its shadows, the clearness of its lights, the depth of its distances, the variety of tones that color lent it, cannot be caught upon the red background of the copper, or the sombre one of the wood, and are brought out only by the whiteness of the paper. What an instrument of civilization, what a benefit to the artist, what a source of enjoyment to those that admire him, and to those who, by means of the engraving, will learn to admire him.

II.

THE ART OF THE ENGRAVER IS BOUND BY CERTAIN GENERAL LAWS, ALTHOUGH THERE EXIST PARTICULAR CONVENTIONALITIES FOR EACH OF THE DIFFERENT KINDS OF ENGRAVING.

THE engraving is a drawing made with a steel instrument instead of a pen or pencil. If the drawing is an invention of the engraver, it must be judged as any other drawing would be. If it is the reproduction of a work of art, painting, sculpture, architecture, cameo, coin, medal, vase, ornament, the first quality of the engraver is fidelity, in the sense that he ought not only to render the original feature for feature, to repeat the contour and the relief, but also, and above all, to preserve the spirit and the aspect of the reproduced work, to bring out its excellencies and avow its defects, in fine, to reveal frankly its character.

If a painting is in question, the engraver having at his disposal, so far as color is concerned, only white and black, ceases to be a copyist to become a translator. He translates truly into chiaro 'scuro the coloring of the picture, and abstracting the tints gives only their *values*. The colors being considered as spots more or less luminous, more or less sombre, he engraves yellow drapery, for instance, with lighter

cuttings and wider spaces than blue drapery, so that the latter forms in the engraving a darker mass than the former.

To imitate the perspective of bodies especially in architecture, the engraver will direct his cuttings towards the point of sight; to imitate aerial perspective, he will express by delicate work the indecision of objects the most remote in the picture, and will reserve the sharp strokes for the parts nearest the eye. As to the diverse substances, wood, stone, marble, earth, trees, water, clouds, stuffs, flesh, he will make them apparent by work that will vary in the different kinds of engraving.

The two great divisions of this art are intaglio and relief, but each of these is subdivided. In the first we have copper-plate, aquafortis, mezzotint, aquatint, imitation of pencilling. In the second, engraving on wood and upon several plates in chiaro 'scuro or cameo, whose development has produced colored engraving.

III.

ENGRAVING ON COPPER.

HOWEVER IMPORTANT IN THE COPPER-PLATE THE CHOICE AND THE TREATMENT OF THE WORK MAY BE, THE ENGRAVER SHOULD STRIVE ABOVE EVERYTHING, BY CORRECT AND EXPRESSIVE DRAWING, TO RENDER THE CHARACTERISTICS OF THE MODEL HE WISHES TO ENGRAVE.



ENGRAVING on copper is, *par excellence*, classic, that which has rendered the most service in perpetuating the works of the great masters and which itself has produced the most master-pieces. It is also called engraving with the *burin*, because it consists in cutting the copper with this steel instrument which traces there, more or less profoundly, sharp, regular strokes, firm, but supple enough to indicate by their direction their projection or attenuation, and by their manner of crossing each other, the material quality of objects, their apparent distance, their optical effect. To copy the contour with

sentiment, to put the light and the shadow properly in their places, to express the visible nature of surfaces, the gradation of distances, the inequality of reliefs, all that does not suffice to the engraver; it is of consequence that the expression should be gotten by one method of procedure rather than another, and it is the choice of method that constitutes the narrow specialty of his art.

A word upon the operations of the copper-plate engraver, — and we could not speak of it here without grateful remembrance of the eminent masters, Calamatta and Mercuri, who have taught us the laws and the secrets of their art.

Let us suppose the engraver wishes to reproduce a half-draped figure. After making a drawing of it, he traces this drawing upon the copper or steel, marking by a succession of points, the contour of the figures, the strongest shadows, even the half-tints. Then with the graver, he masses the shadows by means of a succession of cuttings that are called *first*, and which, following the projections and depressions of the muscles or folds, become more slender, and are farther apart near the light, while they are crowded together and thickened in the shadows. This first work not sufficing, and often letting the pure white penetrate even to the black, the engraver blots out the white by crossing the first lines with more slender *second* lines. But that the lessening of these hatchings may be well graduated, that the execution may be brilliant and smooth, the artist must several

times go over the first furrows of the graver, deepening the cutting. Sometimes instead of crossing the first, the engraver slips in intercalary lines, which, allowing the passage of slender threads of light, suit the imitation of polished, shining bodies.

According as the second lines cross the first obliquely or at right angles, they produce lozenges or squares that may be cut anew by a third line. All these crossings form little luminous triangles that prevent the shadows from growing heavy by preserving a certain freshness in them. The *lozenge*, when oblong, produces a sort of undulation not suitable for flesh, making it resemble a moired ribbon, but in drapery it gives the aspect of cloth hot pressed.

Although the cuttings are lessened at the extremities, the passage from light to shadow would often be too brusque; to manage the transition the artist finishes his cuttings with *points* which are sometimes arranged without apparent order, sometimes distributed with evident symmetry.

Such, in brief, are the methods of the engraver upon copper. They are reduced, as we see, to the combination of two very simple elements, the light represented by the white of the paper, and the shadow obtained by hatchings and points.

In reading the annals of engraving we shall discover the laws of this art: they are engraved upon brass by the master engravers. We have a striking proof of the superiority of art over a handicraft in the early prints, which, in their rudimentary

simplicity, present no manual skill, no choice in methods, but nevertheless have been deservedly admired for four centuries. If we look at the works of Mantegna, what imposing features, in spite of the primitive rudeness of the methods, we see in his bacchanals, his combats of Tritons, and his plates of



TRITON. BY MANTEGNA.

the "Triumph of Cæsar." The graver is guided with savage monotony. The caparisoned elephants

bearing torches and candelabra, the Roman soldiers holding the eagles and the trophies, the musicians sounding the trumpet, the bulls led to the sacrifice, the standards, the vases, the litters, all are engraved in the same way. Short, stiff, and always parallel hatchings mark the shadows. But how strongly he accentuates the characteristics by this uniform mode of procedure. In spite of his unvarying mode of cutting, how well he varies the expressions, how incisive he is in his rude naïveté, how grand in his stiffness.

But such austerity of means is not enough for engraving. It ought to be an art apart from pure drawing. The engraved drawing should be made more interesting by a certain manner of cutting the



SAINT GEORGE. BY MARTIN SCHOEN.

metal, a manner that is to engraving what touch is to painting, calligraphy to writing.

There are German and Dutch masters, Martin Schoen, Albert Dürer, Lucas de Leyden, who have invented and introduced into the art the piquant truth of proceedings that double the interest of an engraving. The "Nativity" of Dürer, and the print of "St. Jerome in his Cell," are of a perfection that leaves nothing to be desired. Seated before a desk, St. Jerome is absorbed in the study of the Scriptures. A bright light enters, through the casement, into the chamber of the anchoret, and throws the trembling shadow of the window-frame upon the wall. All the objects that compose the picture preserve the physiognomy befitting them. The pine of the floor is rendered with charming truth by cuttings that follow the veins of the wood, and turn around the knots. In the lion and fox of the foreground, the fine hair of the one, and the rough hide of the other, are plainly indicated. The incisions of the graver run in the direction required by the perspective, the form and nature of the objects and their dominant dimension. A gourd is suspended from the ceiling and we feel that the surface of the fruit is smooth. The accessories, in a word, play a very interesting optical rôle, perhaps too interesting.

But Dürer failed, if not in knowledge of aerial perspective, at least in marking well the gradation of distance between the different planes of the picture. Lucas de Leyden gave the first instance of it, in indicating by an ever and ever lighter touch the distance of objects. He puts air into his prints; many



THE NATIVITY. BY ALBERT DURER.

people might breathe in them. The plate upon which, following a middle-age fable, he has engraved the "Poet Virgil suspended in a Basket," by a courtesan, presents in the foreground, figures that seem to be within reach of the hand, while in the background the basket in which Virgil is hanging from the window, is rendered by less decisive strokes that indicate the successive layers of air and the distance.

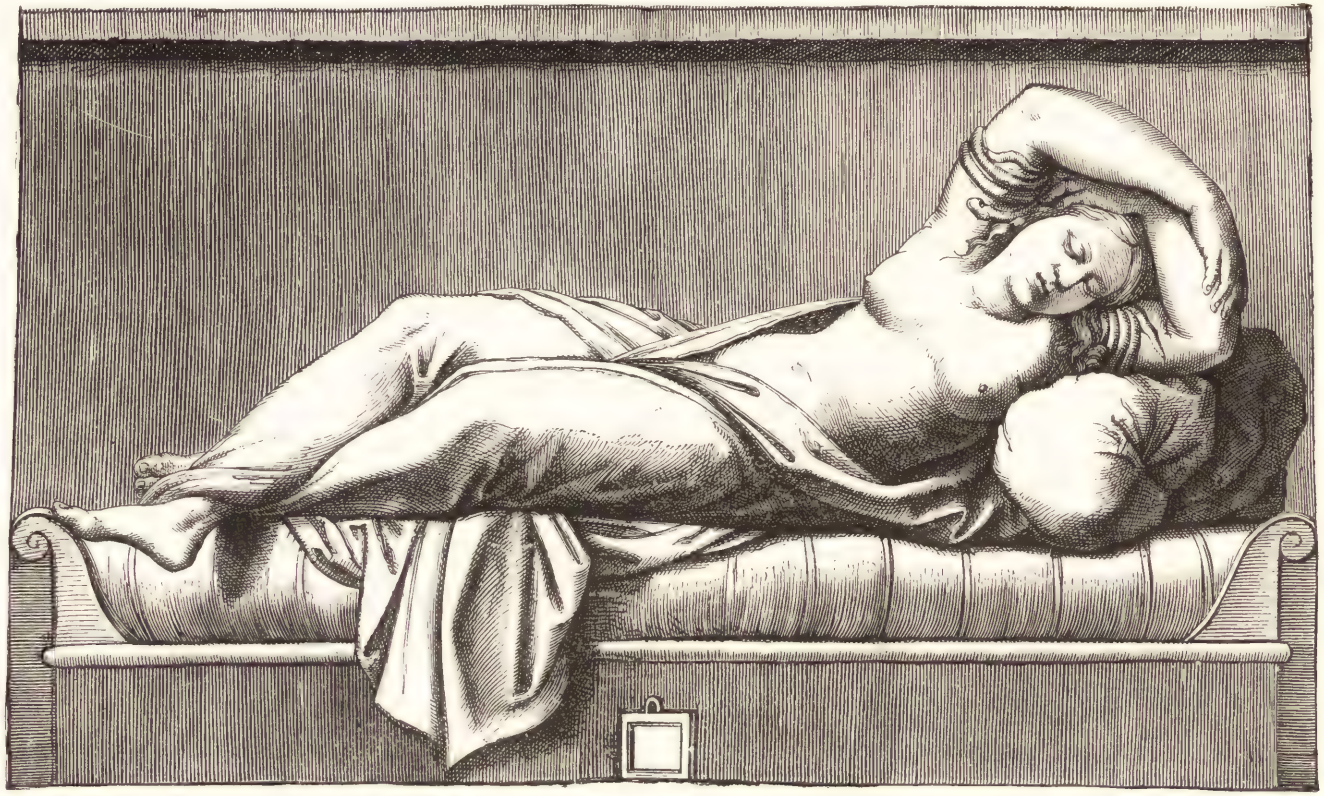
With Marc Anthony, who in the atelier of Raphael works under his eyes, after giving up copying the original but Teutonic engravings of Albert Dürer, something new in the art of engraving is produced. Beauty of execution unites with breadth of style. The savage and sublime monotony of Mantegna is followed by a manner elegant and chaste, varied without being whimsical, imitative without minutia.

Under the surveillance of Raphael, under the empire of his counsels, Marc Anthony conceives engraving as it should be, when attempting to repeat the works of great masters. He conceives it as a concise translation that represents the essential, that indicates everything, says everything, and that, deprived of the language of color, insists upon the supreme beauty of contour, accentuates the character of the heads, the chosen forms, the proud tournure, the strength or delicacy of the ligaments and muscles. His manly, sober manner of cutting the copper, harmonizes wonderfully with the dignity

of the designs he interprets. His supple stroke turns with the muscles and marks the presence of the bones, the depressions or prominences of the flesh; and in reserving broad lights upon the plate, he attains simple but powerful effects; obtains in a small print a grand image.

Marc Anthony is, par excellence, an engraver of style. But what is style in the art made illustrious by the Bolognese master?

Style in engraving is the preëminence of drawing over color, of beauty over richness. I say color, because the engraver, although reduced to the monochrome effect of black and white, is, nevertheless, in one sense a colorist. Raphael had inaugurated style in engraving, Rubens introduced color. He taught the two Bolswert, Pontius and Wostermann, his engravers, not to neglect the value of local tints, which are, after all, only notes in the music of chiaro 'scuro. Cinnabar, for instance, being a more sombre color then rose, ought to be rendered in the print by deeper black. It was the last step of progress engraving could take, the last resource with which it could enrich itself. Nothing now hindered the print from being the equivalent of the picture. Albert Dürer had learned, by variations in the work, to imitate the variety of substances; Lucas de Leyden had shown how to indicate aerial perspective; Marc Anthony, how the suppleness of the tool may serve the triumph of the drawing; the pupils of Rubens were to show in what manner the effect of a painting



CLEOPATRA. BY MARC-ANTHONY.

could be reproduced; that is, its coloration by means of light.

Thus our engraver is armed at all points, for already, in the time of Rubens, all the different methods of cutting copper had been learned. Drapery, flesh, hair, landscape, sculpture, architecture, all the objects that can enter into the composition of a picture, are susceptible of characterization with the point of the graver.

Drapery. The graver should repeat the woof and distinguish the material quality of it. If it is linen, the fineness will be indicated by means of lines closely pressed together, delicate and unique. If it is cloth, the width of the cutting must be proportioned to the coarseness of the tissue. The artist will make one cutting in the direction of the large folds, and run the other, waving and supple, over the half-tints that mark the slight depressions. In crossing at the bottom of the fold, the two cuttings will increase the vigor of the black, but wherever the fabric turns, the stroke of the graver should turn and become slenderer, losing itself at the limits of the contour.

In the case of shining stuffs, like silk or satin, the graver will imitate the creases by a brusque interruption of the strokes at the luminous places, and will imitate the softness of the shadows by slight strokes apart from the first. These same interlineations may be used for metals, vases of gold or silver, armor of polished steel. Edelinck, in his splendid prints after

Raphael, Charles Lebrun, and Philip de Champagne, and Drevet in his "Bossuet" after Rigaud, have reached perfection in the representation of drapery.

Flesh. The artist will take care not to make that of women and children like that of men. He chooses for the first smoother cuttings that express its softness, its delicacy, avoiding the square meshes, which are suitable for hard substances, and the lozenge which is too angular for suavity. Generally delicate flesh is represented by broken cuttings mingled with dots, especially near the lights. These dots, that should be as round as possible, imitate the layers of paint, whether employed simply to terminate the more feeble half-tints, or interposed in the shadows to extinguish the luminous lozenges sometimes placed between the broken cuttings which then resemble the different sized beads of a rosary; the points express still better the tenderness of the skin and the warmth of life. "The points," says Abraham Bosse ("Traité des Manières de Graver en Taille-douce"), "ought to be arranged almost like the bricks of a wall; above all we must maintain order, for whether the thickness of the varnish deceives, or from some other cause, it happens that when the plate has been bitten, in spite of all the regularity observed they are still badly arranged, and if one did not correct by going over them again with the graver, the flesh would seem scabby."

The nude in the faces of men is engraved rather

with lengthened points, that, mixed with the cuttings, mould the flesh but produce an effect less soft, less feminine than the round points. Models of perfection in the treatment of flesh are the "Crowning with Thorns," by Bolswert, after Van Dyck; the "Battle of Alexander," by Gérard Audran, after Le Brun; the "Rat Poisoner," by Cornelius Vischer; the portraits of Rembrandt by George Frederick Schmidt; the prints of Robert Strange. The movement, the roundness of the muscles, the folds of the skin, the dimples, the flat surfaces, the palpitation of the cellular tissue, the warmth of the nude, are admirably imitated.

The Hair. To separate the hairs, to engrave them one by one, is not the best mode of proceeding. Nanteuil, in his portraits of Turenne and Fouquet; Edelinck, in those of Desjardins and de Champagne, have followed it, it is true, but with moderation. Masson, engraving his famous plates of the Marshal d' Harcourt, and of "Brisacier," affects to carry off at the sharp point of the graver, the detached hairs of a wig or a moustache; and it must be acknowledged the extreme boldness of the cuttings produces a sharp, metallic effect. The eminent artist who has so magnificently engraved the "Hemicycle," of Paul Delaroche, has followed the contrary method; has rendered the hair with the required lightness, by strokes relatively wide apart, which, instead of counting the hairs as if they were

combed with a fine comb, gathers them in little masses and produces the same illusion to the eye, because the eye, in the transparency of the whole, supplies the delicacies of detail. It is then just to say the artist is always *true* when he catches the *spirit* of things.

Raphael Morghen, in the print of the "Marquis of Moncade, on horseback," after Van Dyck, wished to imitate with dots the hair of the animal, and, in spite of all his address, he has given to these hairs the appearance of brass wires. Goltzius was more successful when he engraved the beautiful silk, sometimes soft and long, sometimes frizzed, of the dog, celebrated among connoisseurs under the name of "Goltzius's Dog." But Blooteling, in a valuable plate representing a landscape, and a cavalier on horseback, has proved that the skin of a well-groomed horse can be marvellously engraved, like armor or satin, by waving and smooth strokes.

Landscape is rarely made by the graver alone; it is prepared with aquafortis, but this must be done in such a way that in some places the rudeness of the preparation shall disappear, in others be retained. For earth, stones, knotty tree-trunks, mountains, rocks, the hatchings should be broken, left off abruptly, freely crossed in different directions. The coldness of the rocks, their superficial smoothness, their fissures, are well imitated by crossings at right angles; but the roughness of the bark, the uneven

surface of the ground, and of old walls, are expressed by unequal and short strokes, rude points, that seem to gnaw the copper, and that engravers call *nibbling*. Of course, account must be taken of the interposed air, of the aerial perspective, by indicating objects more vaguely in proportion to their remoteness in the picture.

Water, if it is calm, is represented by cuttings parallel to the horizon, with interlines and interruptions that indicate its sheen. The form of reflected objects is repeated by secondary verticals, taking care to separate the forms of these objects according as they are near the foreground or remote. If trees are mirrored in clear water, one will do well to mark the configuration by a light, undecided contour.

When the waves of the sea are tossed in a marine view, the first cuttings follow their movement, and the counter-cuttings run decidedly in lozenges, because thus one imitates better their transparency, but here and there may be bold irregularities of the graver. Balechou, in the "Tempest" of Joseph Vernet, was admirable in this manner. When the water falls in cascades, the cutting naturally runs in the direction of the fall, with insertion of interlines and abrupt breaking off where it strikes the light portions.

Clouds are drawn by horizontal strokes. If they are distant and fade gradually into the sky, care must be taken that the cutting instead of forming a contour at the extremity of the cloud, should die out

there. If the clouds are agitated, tempestuous, the graver must figure the swelling and the agitation, but not be everywhere bellied out. The cross-cuttings will be in pointed lozenges lowered by a third cutting, because thus transparency and a sort of movement can be given; but the flaky vaporousness will be secured by light points. In every case the first cuttings ought to dominate the second. Callot, La Belle and others, have used waved lines for clouds; it is an error; the cloud engraved by circular lines resembles a mass of wool or tow.

As to the foliage of trees, the engraver masses the middle parts and represents in detail only the extremities, always according to the character of the species. His instrument flows over the branches of the willow, bristles on the twigs of the oak, and dilates upon the broad leaves of the plane-tree. The landscape-engraver could not study finer prints than those of Woolett, which revive the solemn aspect of the Arcadian fields of Claude, those of Baudet that reproduce the majestic landscapes of Poussin, and those of Vivarès, of Phillippe le Bas, d'Aliamet, Surugue, and of Dupuis after the savage or fairy scenes of Guaspre, Berghem, Karel Dujardin, Watteau.

Architecture. Let the hand of the engraver be guided by the sentiment of perspective, thus the stroke of his instrument will contribute to the optical illusion; this, first of all, must be observed. The

cuttings that cover the retreating surfaces, ought to approach each other and converge at the point of sight; but the increase of tone thus produced, is balanced by the interlines placed where the cuttings, more widely separated, would be relatively too clear.

In general, it is fitting that the architecture of the picture should be engraved in the direction of the greatest dimension, that the columns, for instance, should be shaded by perpendicular cuttings. The columns in fact perform their office of support only by virtue of their vertical elevation. However, as architecture, in the representations of the painter, is usually only an object of secondary decoration, a foundation subordinated to the figures, it is important that the engraver should harmonize the lights and shadows by avoiding cuttings too strongly accentuated. But of all the hatchings the engraver uses, the verticals are those that strike the eye, especially if they are wide apart. The artist then will keep them pressed together that the eye may be more occupied with the object itself than with that which covers it. In running through the "Life of St. Bruno," in the fine prints of Chauveau after Lesueur, we see how architecture may in engraving preserve its interest, without necessarily attracting attention, without diverting it, so true is it that sentiment may be displayed even in the treatment of stones. The monotonous stroke of the graver seems to glide tranquilly over the walls of the monastery. The scenes of the cloister, the monks at prayer, the

cenobites visited in slumber by celestial visions, detach themselves from the architectural foundation, whose pilasters, capitals, archivolts, mouldings are portrayed modestly, piously, noiselessly.

These many varieties in the art of engraving on copper, have an importance, a charm of their own, but the beauty of design must never yield to beauty of execution; the character of the model must have precedence over the delicacy of the work. Often without troubling themselves about fixed rules, engravers who were also painters, have executed masterpieces. Look at the portraits of Jansenius, of Saint Cyran; of Jean Morin, after Phillippe de Champagne; especially his incomparable plate of "Bentivoglio," in which he equals Van Dyck; the flesh is rendered with astonishing life and vigor, by a mingling of the cuttings of the graver with the bitings of aquafortis, and the free accents of a point, bold, irregular, expressive. On the other hand, Jonas Suyderhoef neglected classic cutting to paint his prints by biting, scratching the copper the better to accent the reliefs of Rembrandt, the touch of Ostade, the abrupt manner and the lively flat surfaces of Hals.

Such infractions of received methods are worth more than the prodigious dexterity of a Goltzius, when it degenerates into fantastic elegance, affectation. In abusing the excellent principle of *enveloping* strokes, Goltzius arrives at effects most contrary to his aim. By twisting the muscles in nude figures, he obtains, not the delicacy of flesh, but the aspect of

metal. In his "Fates," the legs resemble cylinders, because the graver has twice gone over the roundness; in his "Venus," the breasts are like balls of steel, because the second cutting instead of deepening the shadow, curves like the first around the form.

Goltzius, it is true, had sometimes a delicacy imitated from Edelinck; his first cutting after having dominated in the rendering of a large muscle or fold, resumes the second rôle, and is used only to augment the tone; while the second, that at first had served only to increase the black, becomes in its turn dominant. We can, then, in studying the work of Goltzius, find in it fine methods and dangerous errors; but what, above all, we learn in it, and should not forget, is that the copper-plate engraver must always sacrifice the puerile ostentation of the handicraft to the serious dignity of art.

IV.

AQUAFORTIS ENGRAVING.

ENGRAVING WITH AQUAFORTIS, WHEN IT IS NOT A PREPARATION FOR COPPER, OUGHT GENERALLY TO BE EXECUTED WITHOUT APPARENT REGULARITY, WITH FREE STROKES RARELY CROSSED, WHICH NEVER COVERING THE WHOLE PLATE, LEAVE A ROLE FOR THE WHITENESS OF THE PAPER.

EXAMINING once a portfolio of engravings with an excellent landscapist, he said, "Painters make pictures upon their good and bad days, but one uses aquafortis only upon the good days." By an aquafortis is understood, among artists, a composition conceived in a happy moment, engraved as it is invented, whose execution is rapid, facile, without preparation, familiar as conversation, piquant as a stroke of wit. The print is not a translation of impressions, it is an original work. The artist himself writes upon it his thought and his memories. But how can he be at the same time the designer of his engraving, and the engraver of his design?

He takes a smooth plate of copper and warms it

over a brasier. Heated to a certain degree, he passes over it a stick of varnish, that melts at once, and is spread equally over the plate with a tampon. Then the varnish is blackened in the smoke of a lamp; when cooled, he draws with a steel point upon the black foundation, strokes as free as those of the pen or pencil. These strokes, taking away the varnish, uncover the metal they had scratched, so that, the operation finished, we see a red drawing upon a black plate.

Now to give the strokes of the drawing the desired depth, he begins by surrounding it with a little dyke of wax, that he melts by passing over it a heated iron, so as to solder the rampart and prevent all infiltration. The drawing being thus at the bottom of a basin, the engraver pours in a quantity of aquafortis and allows the corrosive to *bite*, that is, to deepen the strokes of the point, a longer or shorter time, according to the effect he wishes to obtain. The acid having no power upon the varnish, acts only upon the portions of the metal left naked by the point. Then the wax is removed, the varnish rubbed off with rags dipped in oil, and the copper dried represents in intaglio, a design from which prints can be taken.

For a long time this method of engraving, so simple, so rapid, had been in use among armorers for damaskeening. We do not know exactly when it was applied for the first time to the execution of prints; but one of the oldest aquafortis is a "Saint

Jerome," by Albert Dürer in 1512; it is the print in which the anchoret is represented half-naked in a rocky, desert landscape. Once known in the ateliers, it attracted painters, and during the sixteenth century was practiced in Germany, the Low Countries, and in Italy. There we see Parmesan drawing upon copper, light, delicate sketches, slender figures, proud and elegant; but these were only the *gossip* of the point, thoughts or rather phrases without connection, abandoned in the condition of sketches. Aquafortis attained its full expression, its value, its color, in the seventeenth century. Rembrandt was its inventor, its poet, its Shakespeare. It was he who made of a simple method an art.

Enlightening this black plate with his genius, he made it scintillate with all the phenomena of light; he knew how to trace upon it all the gradations of shadow. Before him no one had thought of destroying in places the transparency of the paper, as if layers of paint had been washed over it. Rembrandt obtained this effect, either by putting on the aquafortis itself with a brush, or by using the imperceptible shavings that the point of the graver had taken off in scratching the copper. These shavings retain the black, and give to the impression the most delicate and varied half-tints. Colored by these, the print under the hand of Rembrandt becomes a sort of picture painted with aquafortis, for he tones down certain portions of the engraving, lulls the light to sleep, and brings silence into it. Thence those mys-

terious effects in the midst of which he shows us an old man plunged into nocturnal shadows, or the dead Christ descending into the night of the tomb.



FRYING FISH.

AN AQUAFORTIS. BY REMBRANDT.

Thus after Rembrandt appeared, aquafortis was transformed, enriched with resources, to prove to us, by the example of this great master himself, that the

artifices of the trade, the little secrets, the *recipes*, are subordinate to the intentions, to the genius of the designer, much more in aquafortis than in copper-plate engraving. "In the prints of Rembrandt," says a skillful critic, — Henri Delaborde, — "one is more touched by the mysterious meaning of these impassioned reveries, than by the form under which they appear. In the "Christ Healing the Sick," the "Ecce Homo," the "Resurrection of Lazarus," and many other similar *chefs-d'œuvre*, who could blame the want of beauty of the types, or the strangeness of the arrangement? He alone who would begin by examining with a magnifying glass the execution of the ray of light in the "Disciples of Emmaus." Rembrandt has, so to say, an immaterial manner. Sometimes he touches, strikes the copper as it were by chance, sometimes proceeds by delicate cuttings; he interrupts in the light the stroke that marks the contour, to make it more energetic in the shadow, or reverses this method. He uses instruments as Bossuet used words, subjecting them to his thought, constraining them to express it, without preoccupation of their end, their subtlety. Like him, he composes an eloquent and magical style with the most diverse elements, the familiar and the pompous, the vulgar and the heroic, and from this mixture results the admirable harmony of the whole."

Such as Rembrandt conceived it, such as the other Dutch painters, Pierre de Laar, Paul Potter, Ruysdael, Berghem, Karel Dujardin, Stoop, Van de Velde,

Ostade, practiced it, aquafortis engraving could not have flourished in the times of the first great masters, for it is hardly compatible with style. Marc Anthony, when he engraved the "Judgment of Paris," after Raphael, or the "Climbers" of Michael Angelo, did not foresee this kind of engraving, would not have comprehended it. What a difference between them! As the graver with its regular step, its methodic elegance, befits solemn compositions, ideal figures and the nude, so aquafortis in its capricious march, suits familiar or rustic things, savage landscapes, picturesque ruins, and the episodes always new, of the struggle ever going on under our eyes between light and shadow. The graver renders by slow strokes the *chefs-d'œuvre* of sculpture and monumental painting; the aquafortis recalls the passing incidents, and the varied phenomena of real life, or the fancies of a day. The graver, in a word, corresponds to the majesty of art and the severe eloquence of drawing; the aquafortis represents improvisation, liberty, and color. Under the point of Van Ostade it interests us in the disorder of a poor, rustic house, the adventures of the tap-room, the ugliness of a peasant and his gossip; in the work of Ruysdael it communicates to us the sentiment of melancholy that wooded solitudes inspire in dreamers; upon the copper of Thomas Wyck, of Karel Dujardin, it lends a singular charm to the figure of a beggar asking alms, to the mules trotting along the highway shaking their bells. Aquafortis

engraving attaches itself from choice to all that is irregular, fantastic, unfinished, or in ruins. It loves to render the falling plaster of an old wall, the dilapida-



A PEASANT PAYING HIS SCOT.

AQUAFORTIS OF OSTADE.

tion of a well from which a servant is drawing water, the decaying roof of a grange where the pigeons are nesting, the overturned cart on which the chickens have perched, and even the dung-heap of the

barnyard in which the swine are wallowing. But O, miracle of art; in its kingdom are neither unclean beasts, nor *odious monsters*, nor unhealthy exhalations, nor fetid odors. Through it all is purified, and painful sensations become agreeable sentiments; by means of it the insignificant attracts us, the useless captivates, ugliness can please, the ignoble even, though unpardonable, is pardoned.

In the French School one artist has united aquafortis to style — Claude Lorraine. It is true his genius manifested itself only in landscape. But by a sublime transposition he brought the ideal down into material things; the landscapes he has engraved are astonishing, without being fantastic; attractive, without disorder. The firmament is pure, the earth smiling, and if we see the sea, it is calm, radiant, hardly moving under the evening breeze. Even when, in the prints of Claude, the aquafortis gnaws the acanthus leaves of the broken column or the remains of a ruined bridge, the ideal dominates the picturesque.

Another famous example of the introduction of style by means of aquafortis, is the work of Piranesi. Who would believe that a familiar engraving could produce the prints of this engraver without a peer, without a possible imitator. Here also we must recognize the subordination of the method to the sentiment. Like the ploughshare, the point of Piranesi goes over the field of his plate, and torrents of aquafortis dig furrows in it, into which the shadows

precipitate themselves. His print is traversed by the sun, and broad beams perform the office of half-tints. He exaggerates the solemn, even to the terrible. He makes the antique monuments of Rome more imposing in their image than the reality. The Pantheon of Agrippa, the temple of Antonine, the colossi of the Quirinal, the mole of Hadrian, the débris of the Forum, seem vaster in the folios of Piranesi than in the eternal city. This unique engraver amplifies and elevates all that he touches. In reducing the Coliseum he aggrandizes it. Upon his plates the light vibrates, the shadows move, the stones become animated, and Roman grandeur seems immense. One would say the fragments of Trajan's column, the tympanum of the arch of triumph, the frieze, the trophies, have left their colossal imprint upon his plates. In his hand, aquafortis has the manner of Michael Angelo.

Whatever may be the authority of example in these exceptional works, it is not less true that aquafortis engraving does not lend itself readily to works of large size. Rembrandt himself when he went beyond the quarto, retouched his plate with the graver, thus taking away the character of inspiration. *To finish an aquafortis* seems a contradiction in terms. Ostade going over his engravings with the *dry point*, that is upon the naked copper and dry, has generally made them heavy and dark. The prints of Van Dyck, especially his portraits of artists, before the graver has touched them, are exquis-

ite works; sketches, but perfect. Sneyders, François Franck, Breughel, Vostermann, De Vos, and others are living; they move, speak to you, call you, stretch out the hand to you. With a few strokes of the steel, Van Dyck has indicated the boniness of the brow, the depression of the temples, the projection of the cheek-bones, the cartilage of the nose, the flat parts of the cheek and chin. Two strokes more, a few dots here and there, a little nibbling, and you touch the beautiful, elegant hands, with their long fingers and delicate joints. You seem to feel the moisture of life that the paper imbibes. But what has become of these marvellous works when the artisans of Antwerp have finished them with the graver? What heaviness! what coldness! what effacing of all the accents of life!

Unless you wish, like Rembrandt, to obtain a mysterious effect, the whole plate must not be covered. In general, plates intended for biting ought to be prepared with little work, in view of the whiteness of the background. We must, as the engravers say, *let the paper work.* Tiepolo, Canaletti, Thomas Wyck, have allowed it to appear even in the shadows, by avoiding cross-cuttings, reaching the greatest vigor by repeated bitings. They have thus obtained a certain shimmering of silver light that enchants the eye. But what piquant, spirituelle effects do we not owe to the rapid, but incisive point of Callot. Without going back so far, the aquafortis of some of our contemporaries, above all, those of Charles

Jacque, may serve as models to young engravers in the art of lighting up the print by economizing the bitings, filling it without stifling, being charming at little expense, that is to say in constant collaboration with the light of the paper.

V.

MEZZOTINT.

MEZZOTINTS LACKING FIRMNESS, THE ENGRAVER MUST CORRECT THEIR SOFTNESS, AND UNLESS A VAPOROUS EFFECT IS TO BE GIVEN, MUST BRING OUT THE LIGHTS WITH A FIRM, RESOLUTE HAND.

THE mezzotinter proceeds in a manner the reverse of that of the copper-plate or aquafortis engraver. They distribute black upon a white surface; he white upon a black one. They use a graver or a point to make lines and shadows upon a polished plate that represents the clear portions, he a *scratching-knife* and *scraper* to bring back lights upon a blackened plate that represents the shadows.

The graining of the plate is obtained by means of the *berceau*. This is a convex instrument, striated like a fine grater. It is passed over the copper with an oscillatory movement, so that the plate bitten by the teeth of the grater, is covered with slight asperities that form the graining. If a plate prepared in this way is put under pressure, one gets a proof covered with a uniform velvety black. This black is the basis upon which the engraver is to work.

After having counter-drawn his design, he puts in the half-tints and the lights, using more or less the grain of the plate, or scratching it clean with the scraper. These lights, half-tints and blacks that the graining forms, give the desired effect of chiaro 'scuro. The art of the engraver consists, not in engraving the copper, but in adroitly destroying what the berceau had engraved upon it.

Horace Walpole attributes the invention of the mezzotint to the nephew of Charles I., Prince Rupert, who lost the battle of Marston Moor. "This prince," says Walpole, "who had retired to Brussels after the tragic death of his uncle, going out one morning, noticed a sentinel rubbing his gun. 'What are you doing?' asked the prince. The soldier replied that the dew that had fallen during the night had rusted his gun, and he was *scraping and cleaning it.* The prince looking at it closely, thought he saw something like a figure stamped on the barrel, with innumerable little holes close to each other, like damaskeening on silver or gold, of which a part was already engraved. The *genius fertile in resources* drew from this simple incident the conception of the mezzotint. From what he had seen, the prince concluded that one could produce upon a plate of copper fine asperities that would give to the impression a black proof, scratching which, one could easily get the half-tints and the lights. He communicated this idea to the painter, Wallerant Vaillant, and together they proceeded to experiment."

From the recital of Walpole, it would seem that Prince Rupert invented the mezzotint after the death of his uncle, necessarily after 1649, but this assertion is falsified by the fact that in 1643 an officer in the service of Hesse Cassel, Louis de Siegen, had published a portrait-bust of the landgravine, Amélie Elizabeth, engraved in mezzotint. Léon de Laborde has established from the testimony of Rupert himself, and the letters of Siegen, that the latter was the inventor of mezzotint and the author of the first engraving in this style. But if Prince Rupert were not the inventor, he brought it to perfection in the print of the "Executioner of St. John," after Ribera. From this fine print we learn what can be accomplished by mezzotint when the hand of a master corrects its softness, its cottony appearance, by boldness in bringing out the lights, brusqueness in transition, and firmness in using the scraper. Thus treated, mezzotint becomes like a painting, because to the softness of broad and well united shadows, it adds the free touch, the vigorous relief, that belong only to painters. These fine effects the graver cannot easily attain, because it digs in the metal only the blacks, and contents itself with managing the lights instead of applying them resolutely as in the mezzotint, by energetic strokes of the scraper.

The mezzotint is more suitable than any other style of engraving to represent phantoms, incantations, artificial lights like those of the lamp, torches, fire, all the drama of conflagrations, all the effects of night.

Gérard de Lairesse says it is also most fitting for plants, fruits, flowers, vases of gold or silver, armor. But to us it seems that objects distinguished by the rich variety of their substances and colors, that present aspects so diverse, can be better rendered by the graver. Classic engraving has invented a thousand ingenious ways of characterizing objects by the cutting of the copper, metallic bodies as well as the satiny surface of flowers or the spines of a stem; the down of a peach as well as the rough shell of a nut, or the rind of a lemon. But even in the hands of a master like Richard Earlom, mezzotint has but one way to express all these different surfaces, and can reproduce them with only uniform softness.

Another fault inherent in this style of engraving, is that the plates are soon worn. The English, who have excelled in it, say they get scarcely more than a hundred good impressions from a plate, the rubbing of the hand and the press quickly blunting the graining upon the surface of the copper. The first impressions are not the best, are too hard and black; the finest are between the fortieth and sixtieth; the graining is then softened, but has not lost strength.[1]

In France, the mezzotint was never a favorite with artists or the public. Her school, rarely led away by imagination, did not give itself up to sombre fantasies, Rembrandt effects. Before the advent of romanticism, French art had nothing like the Biblical

[1] Plates of copper or steel may be covered with a layer of metal by a galvanic process, so that about a thousand impressions of equal excellence may be taken.

inventions of Martin, the magic lantern, and fairy scenes that borrow from the mezzotint a certain vague poetry, like that of dreams. The precision of the graver, the spirit of aquafortis, suit it better.

If mezzotint does not imitate well solid and hard bodies, it is valuable for rich hangings, satin, velvet, and for flesh. By the depth of its shadows, the union of their masses, its blended half-tints, it adapts itself marvellously to the fantastic compositions of Bramer and Rembrandt, to the night scenes of Schalken and Gérard Dow, and to the moonlight effects of the melancholy Elzheimer.

There is a kind of engraving that resembles mezzotint and yet differs from it, — *aquatint*, — an invention of a French painter, Jean Baptiste Leprince, in 1760. After tracing with the point the contour of objects, the plate is covered with a layer of powdered rosin, or salt, or fine sand; across this aquafortis is passed, which thus sifted, produces on the plate a uniform graining, suitable for imitations of aquarelles in India ink, sepia, or umber. The shadows seem made with the brush.

The aquatint was skilfully managed by the inventor, whose first prints passed for aquarelles. Facile, rapid, it has been used to reproduce the works of an eminently popular artist, Horace Vernet, whose prompt, impatient march would have wearied a legion of copper-plate engravers.

The Spaniard Goya, used the aquatint successfully, making it an element of expression. In his

"Misfortunes of War," and "Caprices," it contributes to the physiognomy of things. Here it veils a portion of the print and adds piquancy to the satire upon manners, by leaving corruptions more profound to be divined. There it spreads damp shadows over the tragic scenes of the invasion, and covers them with a mystery that augments their horror. Some of his prints seem, not washed with aquafortis, but bathed in blood. Urged by fever, moved to indignation, his hand translates in haste what is present to the eyes of his imagination or his memory; one would say 'twas a Velasquez intoxicated with fury, who had borrowed for a day the acids of Rembrandt and his genius.

Beside this style of engraving is placed the *imitation of pencilling*, the honor of whose invention, about 1756, is disputed by François and Demarteau, and which Louis Bonnet applied to the imitation of pastel by combining differently colored plates.

The pencilling is imitated with a little instrument called a *roulette*, with a toothed wheel, that, passing over the copper, produces points resembling crayon hatchings. This instrument, used in jewelry, was applied to engraving first in 1650 by Lutma, son of the jeweller whom Rembrandt has immortalized in an aquafortis portrait of the rarest beauty. But instead of using the tool with the hand, Lutma struck in the teeth with the hammer; hence the engraving was called *opus mallei.*

There is a distinction to be observed between the

pencil-manner and the *pointillé*, which is the art of modelling with points more or less widely apart, that indicate the delicacy of flesh, its *morbidezza*. At the beginning of the sixteenth century, a Paduan artist interpreted in this manner the paintings of Giorgione. But while this admirably suits the light and color of Giorgione, it is misplaced and powerless to express the superior qualities of Mantegna or any other painter of severe style.

Pointing is a kind of engraving very ancient, so true is it that in all inventions, great or small, there is always some one who preceded the inventor.

VI.

WOOD ENGRAVING.

ENGRAVING UPON WOOD, INCAPABLE OF PRODUCING THE DELICATE SHADINGS OF COPPER-PLATE, SUITS SERIOUS WORKS, WHICH, BY THE TERSENESS OF THEIR EXPRESSION, LEND GRANDEUR EVEN TO WORKS OF SMALL SIZE.



IT is not to the engraver, it is to the designer upon wood the principle just enunciated is addressed. What is the rôle of the xylographer? He is scrupulously to respect the drawing traced for him upon a piece of wood, and hollow more or less profoundly all that is not this drawing. Formerly, wood-engraving was called *taille d'épargne;* it consisted in *saving* all the strokes of which the image to be put in relief was formed.

It would seem that such work left to the engraver no liberty of interpretation, that he must resign himself to passive obedience. But his task is not purely mechanical.

To obey the sentiment of another, especially in works often of exquisite delicacy, one must have the faculty of feeling. Wherever man puts his hand, we recognize the trace of his mind. This is so true, that the same drawing may become unctuous or dry, colored or pale, as the tool of the engraver shall have hollowed it discreetly or rigorously, as he shall more or less have *spared* it. That is, in cutting the wood so as to put each stroke of the designer in relief between two depressions, the engraver may have taken something from the edges of the stroke, but were it only so much as a hair's breadth, it might suffice to give a sad, arid, cold aspect to the warmest drawing.

There is, then, room for sentiment on the part of the wood-engraver even when everything has been indicated, fixed for him. With more reason may he become an artist when the designer has left him a choice, for it sometimes happens that the drawing given to the engraver is made by a painter, who, not knowing how to trace line by line the forms of his thought, or not wishing to take the trouble, has only expressed it in mass. The work is then abandoned to the engraver. He must render the chiaro 'scuro by a cutting that seems to him more expressive than another; must calculate the width of his strokes

make them simple or crossed, follow the evolutions indicative of the object represented; attenuate the strokes, interrupt them or finish them by points lighter and lighter as he recedes from the foreground, or draws near the light. In such cases the wood-engraver becomes an artist with the same title as the copper-plate engraver.

Glancing at the oldest prints, we see that drawing upon wood was coarse and rude, but in the rudeness of its rapid work it was on the road to the grandeur and true style demanded by wood engraving. In the first xylographic books, the "Bible of the Poor," and the "History of the Virgin," we notice a naïveté that is not without attraction and a lively sentiment of reality, joined to a subtle and mystical spirit; in a word, we recognize the influence of Van Eyck. The thought of the master is translated by a simplicity of means that, rudimentary as it is, shows, nevertheless, a beginning of expression. These books, however, were printed before 1454, at least according to the dictum of a very competent author — Firmin Didot ("Essai sur l'Histoire de la Gravure sur Bois"), and his opinion is strengthened by the fact that these works, properly speaking, are xylographic books. We understand by this word, in its restricted sense, books in which the picture and the text were engraved upon one plate, and the impression taken with a brush; books that preceded press-printing the first specimen of which ("Les Lettres d'Indulgence") dates from 1454.



FROM THE LIFE OF THE VIRGIN. ALBERT DÜRER.

When Albert Dürer appears, wood engraving suddenly rises to perfection without going beyond its primitive condition of simplicity. Traced with breadth and decision, the drawings of Dürer teach us the concise, vigorous manner demanded by this kind of work. He whose graver was so delicate when cutting copper, who lingered over the slightest details, was transformed in drawing upon wood, and renouncing secondary half-tints, fine transitions, he composed and saw *en grand;* distributed broad lights, produced imposing effects, to be taken in at a distance, and to impress themselves strongly upon the memory.

The fantastic and terrible prints of the "Apocalypse"; the hundred and thirty-five plates upon which unfolds itself so magnificently the triumphal march of the Emperor Maximilian; the two series that represent the "Passion of Christ," and that "Life of the Virgin," in which the grace of costumes, the life of countenances, and even their delicacy is united to sobriety of work, and the large works ordered by Maximilian of Burgmair and Schauffelein, are and will remain specimens of high art applied to xylography. But these prints of extraordinary, often colossal size, could be rarely used, being suitable only for the ornamentation of the partitions of a vestibule, or the walls of a gallery or palace. Wood engraving seems above all suitable for the illustration of books; the great painter, Holbein, gave admirable models of it, models that have not been surpassed.

In frames smaller than the palm of the hand, often

but an inch square, were introduced pictures, sometimes historical, sometimes familiar, sometimes rising to the height of tragic symbolism; real pictures with their architecture, their landscapes, their background, their distances, their accessories. The same sheet of paper was to contain the ideas of an eminent mind and the work of a superior artist. The "Dialogues" of Lucian, the "Adagia" of Erasmus, the "Utopia" of Thomas More, the Treatises of St. Augustine, the Epistles of St. Paul, the Bible, are decorated with magnificent frontispieces in which figure the personages of pagan antiquity and of the Scriptures; gods, sages, heroes, Hercules and Cerberus, Apollo pursuing Daphne, Solomon, Socrates, Pythagoras, Curtius leaping into the chasm, Scævola holding his hand in the kindled brasier, Judith killing Holofernes, Cleopatra slaying herself. Sphinxes, sirens, satyrs, troops of tritons and children guiding the car of Neptune, a band of peasants chasing a thieving fox, a swarm of Cupids playing with garlands or masks, frame these frontispieces that prepare the mind of the reader and lure him on, giving a body to thought by showing the invisible. Sometimes the frame of the title is a triumphal arch under which stands the figure of Erasmus, a statuesque effigy, an apotheosis.

Hardly has the reader crossed the threshold of the first page, before his eye is arrested by singular, sometimes fantastic images. The cold letters of the alphabet, that begin the different chapters of the book,


·E·R·ROT·
TERMINVS
Corporis effigiem si quis non uidit Erasmi,
Hanc scitè ad uiuum picta tabella dabit.

are embellished with arabesques, flourish in gardens, move in lively figures. Within the microscopic dimensions of a letter, Holbein has represented the drama of Death, twenty-four times repeated.

"In the diminutive subjects of his alphabets," says Renouvier, "it seems that the narrowing of the field has only spurred on the artist, such life and expression does he display. See in the Y of the "Alphabet of Death," the skeleton, with a superb movement, striding over the cradle, lifting with both hands the babe from beside the terrified mother. The scene is less than an inch square; but if Michael Angelo had had a block two yards long, he could not have been grander, more terrible."

After having exercised his verve upon this funereal theme, that fed the terrors of the Middle Ages, Holbein has resumed it in his famous prints of the "Dance of Death," which are, with the figures of the Bible ("Icones veteris Testamenti)," the *chefs d'œuvre* of wood engraving. Nothing can be more moving, more vivid than these images, always varied and always similar, of Death triumphant. We penetrate with him first into Eden, where begins with the original sin the moral death of the human race; afterwards into homes the most diverse; the laboratory of the alchemist, the cabinet of the astrologer, the hut of the miser, the alcove of a dreaming duchess. In this way tragedy familiarizes itself in genre pictures and better possesses itself of the reader. It is remarkable that the greater number of the persons

surprised by Death are calmly resigned to their fate. The captain defends himself from habit; the begging friar, the prince robed in ermine, the abbess and the abbot, also resist. The last, a sated and plethoric Vitellius of the cloister, repulses Death, who, dancing and grinning, has put on the Abbot's mitre, and bears on his shoulder the crucifix of the dying man.



ADAM CULTIVATING THE GROUND.



THE PEDDLER.

FROM HOLBEIN'S "DANCE OF DEATH."

A striking feature in this series of engraved compositions is the malicious, ironical, often facetious character stamped upon Death. Here he strikes with his wand the tambourine before the wedding procession, there he takes the rôle of a chambermaid, and clasps around the neck of a pretty countess a necklace of bones. Farther on he stops the peddler

loaded with his basket, or pulls off the hat of a cardinal who is selling indulgences. Sinister in his carnival disguises, sometimes he puts on the accoutrements of Folly to mislead a queen; sometimes an unexpected guest, in the garb of a cup-bearer, he pours the deadly beverage for a king. Now he puts on the deacon's stole to interrupt the sermon of the preacher; now that of the sacristan, with bell and lantern, to guide the convoy of the priest himself bearing the viaticum to the dying, or he takes the place of the dog of the blind man, who, groping towards the tomb, trembles lest he should make a false step. Here Death has not the horrible grin; he is serious, pitiful. See the resigned sadness of the poor husbandman, who, pushing the plough before him, is suddenly assisted by a plough-boy who is Death. How touching is this scene that nature frames with such naïve grace, lighted up by the sun sinking to the horizon behind the tower of the village-church.

All this is rendered by strokes never crossed, with a delicate graver varied in its movements, but always elementary in its methods, always laconic. The wrinkles of the eye, the muscles of the mouth, the furrows made by fear or hollowed by life, the character of the hair, embonpoint, emaciation; all are indicated by a firm, decided stroke, and although the softening of transitions is incompatible with the smallness of the frame, the expression never becomes a grimace. As to the landscape, the architectural background, the accessories, the sentiment of

linear perspective in the management of the hatchings and the indication of distance by the attenuation of the work, suffice to give them an optical interest, so that the graver of Holbein, or rather that of the engraver under his orders, seems by turns rich in the scenes of the "Emperor" and the "Pope," undulating in the "Paradise," picturesque in those of the "Carter" and the "Husbandman."

A perfection has been added to xylographic prints by putting bits of paper or thin cards on certain parts of the wheel that transmits the pressure of the roller to the plate, thus securing greater or less pressure at desired places. If one wishes to bring forward the foreground of an engraving, increased thickness of cards is given to the place that corresponds to it. Is vagueness desired in the background, the roller is forced farther off, so that the pressure being less and the ink less abundant, the tone is lighter.

Aided by these new methods that make printing an auxiliary artist, wood engraving now produces marvels. In France, more than in any other country, this mode of engraving has served the interests of thought by the ornamentation of books. The profession of printer and book-editor were often united, and from the fifteenth century exercised at Lyons, Paris, and other cities of France, by men of culture and taste whose names belong to the History of Art. Among the number are Simon Vostre, whose "Books of Hours" have such curious borders;

Antoine Vérard, who used xylography as a background for colored miniatures; Guyot Marchand who, before Holbein, printed "Dances of Death"; and Geoffroi Tory, who was distinguished by the universality of his knowledge and his talents.

The last imported the Italian style of the Renaissance into our wood engraving, in which, up to that time, had appeared only a Gothic archaism or the Gallic spirit, with its familiar turn, its ironical naiveté, its malice. We must recall also the names of Jean Dupré, Trechsel, Jean de Tournes, Bernard Salomon. The names of these old printers are today sought as works of art. French and Italian artists of the first rank have not disdained to write upon wood the inventions that were to put in relief their knowledge and that of others. As Titian painted with great pen-strokes the master-pieces Boldrini was to cut, as Jean de Calcar drew at Venice the magnificent plates for the "Anatomy" of the celebrated Vésali, so Jean Goujon illustrated the translation of Vitruvius by Jean Martin, while Philibert Delorme and Jean Cousin traced the elegant wood engravings that decorate their books upon architecture and perspective.

Our age has witnessed the revival of wood engraving, a revival that twenty-five years ago gave us the graceful and tender vignettes of Johannot and the spirituelle sketches of Gigoux, who, at every page of "Gil Blas," opens a window upon Spanish, or rather upon human life. All these little works conceived

and executed according to the laws of xylography, seem to speak to the reader a language brief, unfinished, that it is his task to finish. At the present moment it is no longer so. Treating his plate as a canvas washed with white, the designer covers the wood with blended tints, imitating the layers of the aquarelle, or the depths of mezzotint. Forced to follow the modelling of the figures, to put them in unison with a mysterious landscape or a background richly and carefully finished, the engraver is led out of his domain to attempt the impossible imitation of copper plate engraving. But this bold overthrow of the old method has produced certain effects of unforeseen beauty in the interpretation of the "Hell" of Dante, or, when before the eyes of the reader are unrolled the savannas, the virgin forests that in "Atala" are so mingled with the drama as to seem like mute but impassioned personages. Finding under their graver an unknown gamut of varied tones, of fugitive half-tints that serve as transitions more or less rapid between the velvety, profound black, and the pure, brilliant white, the engravers of Doré have represented marvellously the landscapes of America, the herds of buffalo traversing the Meschacebé, the enormous pines whose overthrown trunks serve as bridges across yawning chasms, the dawn rising over the Alleghanies, and the moired heavens, diapered with clouds that seem to change its aspect whether they catch a sunbeam in their passage, or the moon fringes them with its light. But

the weakness of the new method is betrayed in the representation of antique scenes, in which man held the first place, where the idea dominated the pantheism of the landscape. In these representations the accessory has become the principal, the setting of the thought devours the thought itself, the actors are overpowered by the magnificence of the decorations.

For the illustration of books, it is better to go back to the traditions of Holbein, Calcar, and Jean Goujon, and for large plates, to the firm, concise cuttings of Albert Dürer, or to the style of Christopher Jegher, the Piranesi of wood engraving, who, enveloping with a superb stroke, forms that palpitate upon the paper, makes them vibrate and blaze with the genius of Rubens.

VII.

ENGRAVING IN CAMEO.

Engraving in colors.

The *cameo* is an engraving of several tones obtained by the aid of superposed plates. I say of several tones and not of several tints, for it is an engraving of a single color, a monochrome; but this tint bistred, greenish, or bluish not being the same as that of paper colored with bistre, green, or blue, the chiaro 'scuro of the print allows always some parts of the pure white of the paper to appear.

The most simple cameo is that made with two plates engraved in relief. The first gives the proof the contour and the strong shadows; the second inked, for instance, with bistre, will print in bistre the half-shadows, without touching the lights, so that the whiteness of the paper, everywhere that it may have been *spared*, will heighten the bistred tint and the dark shadows, as if the painting had been first washed then touched with white with the brush.

If one wishes to graduate the half-tints he will use three plates, the first printing the most intense black, the others a second and third tone of different intensity. Sometimes the three plates having been covered with black, a fourth is used to spread a uniform

color over the whole plate, always reserving the white for the lights.

It is interesting to know how the inventors of cameo were led to their invention. Printing having replaced the beautiful and rare manuscripts by multiplied books, the first printers wished to make the products of their industry pass for manuscripts, and thus add the appearance of quality to quantity. To accomplish this, they left in white the capital letters, the titles or *rubrics* — so-called because usually written in red. After the book was printed, these rubrics and letters were filled in by the hand of an artist.

But the secrets of printing were soon known. "When it became impossible," says Paul Chéron, ("Gazette des Beaux-Arts"), "to conceal the means by which copies of the same book were multiplied, there was an economic interest in multiplying also the ornamental letters. These letters were evidently composed of pieces of different colors inked separately, then fastened one within another, to be printed simultaneously."

These methods were a first step towards cameo-engraving, to which we are indebted for so many magnificent works. Placing one engraving within another as in a box, to print them all at once was suitable for the reproduction of the enlaced ornaments of a capital letter, because the contour is fixed, precise. But it was inapplicable to all that demands gradation of tone; shadings like the human figure

and landscape. They used then successive plates, that, being superposed, at each impression left a shade of color upon the paper; thus it was possible to imitate aquarelles retouched with white.

The perfection of the cameo, that is its perfect resemblance to a drawing, demands that the plates should be of exactly the same size, and that each in turn being put under press, they should fit each other with the greatest precision. To secure this, fine points, that penetrated the paper always in the same places, were inserted at the four angles of the frame, or upon the wheel of the press, to mark the points at which the plates must touch each other.

This was, properly speaking, the cameo. The Italians, who claim its invention, gave it the name of engraving in chiaro 'scuro, because it is monochrome; they attribute its invention to Ugo da Carpi, who claims it in an essay addressed to the Venetian Senate, in 1516. But plates by Lucas Cranach and Baldung exist, seven years anterior to the first cameos executed by Da Carpi. Hence the honor of the discovery belongs to Germany.

But the most beautiful cameos have come to us from Italy, naturally because the Italian masters, designers *par excellence*, have excelled in a branch of art whose first element is drawing, "the *capo di tutto*," says Vasari. Their compositions, when equally well printed, surpass all that have been executed elsewhere. When we look at the "Triumph of Cæsar," drawn by Andrea Andreani, after Mantegna, we

seem to have before us the originals themselves of those sublime temperas, in which the painter has evoked the Roman world and the graces of antique sculpture. When we find upon the plates of the same engraver the grand drawings traced upon the dome of Siena by Beccafumi — pictures that arrest the steps of the traveller and excite his admiration — we are charmed to see them again and are not less happy to think that others, without having journeyed to Italy, may enjoy them.

The use of copper-plate engraving in the cameo was a progress towards engraving in colors, whose discovery is due to a painter of Frankfort, Jacques Christopher le Blon. This ingenious artist thought he could obtain by successive impressions from superposed plates, not merely a monochrome effect but a print in several colors. Wood engraving would have been too coarse for work demanding above all things delicate shadings. Le Blon used copper plates upon which he made a graining with the *berceau*, a steel instrument with almost imperceptible teeth, finer than that for mezzotint, and as such graining deposited upon the paper transparent tints, he conceived the idea of combining these tints with the three primitive colors, *yellow*, *red*, *blue*, which placed one upon another would produce mixed colors, orange, violet, and green, without reckoning the white of the paper, which, reserved in the printing, would give a fourth element of color.

The chiaro 'scuro of the print would consist in the

play of dark and light colors, and as the graining could not engender shadows strong enough, recourse was had to the graver to hollow the copper in places where the brown ought to be black and that demanded vigorous touches.

Such was the method invented by Le Blon, or at least brought to perfection by him, for rude sketches of this method had already appeared in certain impressions essayed in Holland by Pierre Lastman, the master of Rembrandt.

The art of printing pictures is a useful invention but upon condition that the imitation of painting shall be avoided. The "Portrait of Louis Quinze," printed by Le Blon, with four plates, shows the defects of his invention, ill employed. The delicacies of the human head, and the expression of life, are not consonant with this mechanical mixture of colors, which is neither engraving nor painting. There results a bastard production, to which one may apply the dictum of the celebrated engraver Longhi: "Colored prints, never able to be what is really necessary, are mere puerilities." As compensation; in rendering intelligible to the eye scientific works, books upon natural history, anatomy, architecture, or polychrome ornamentation, a print in colors becomes a very valuable auxiliary.

After having furnished the charming engravings of Debucourt, the methods of Le Blon were replaced by *chromolithography*, which consists of suc-

cessive impressions from lithographic stones, as numerous as the tints that are to appear in the print. Tried at Munich in 1814, perfected by Engelmann in 1837, and brought to an unexpected degree of delicacy and transparency, by an artist of Cologne, Kellerhoven, lithography in colors is used for the reproduction of the miniatures of old manuscripts, to illustrate books of ornamentation, because, thanks to the perfection to which the fabrication of paper has been brought, the juxtaposition and superposition of colors can be made with the greatest exactness. "Formerly," says Firmin Didot ("De la Gravure sur Bois"), "it was necessary to soften the rigidity and grain of the paper by wetting, before putting it under the press, and the variable dampness of the paper thus soaked with water, distended the sheets unequally and occasioned continual variation in the marking points. These inconveniences are avoided by printing upon dry paper."

The "Temple of Selinus," by Hittorff, the "Grammar of Ornament," published at London by Owen Jones, the "Spanish Iconography," published at Madrid, by Carderera, the "Imitation of Christ," by Curmer, and the numerous plates that accompany the books of Gailhabaud and Cæsar Daly, are magnificent works that it would have been impossible to execute and that would have been almost unintelligible without chromolithography.

Nevertheless, considered in its noblest attribute, which is to perpetuate the great masters, engraving

is not compatible with color. In aspiring by painful efforts at impossible similitude, it loses its peculiar characteristics without acquiring new ones. What it seeks to gain in richness by mechanical artifices, it loses in dignity by the change of style. Contrary to to the opinion of Emériс David ("Historie de la Gravure"), we believe with Diderot, that engraving is less a copy than a translation. Like the musician who transposes an air, like the prose-writer who interprets in his own language the poets of a foreign tongue by insisting above all and before all upon the genius of the poem, the artist who engraves a painting upon copper, reproduces the spirit of it, that is the composition, drawing, character, expression; and if the local colors disappear, the general coloration remains, concentrated, unified in the chiaro 'scuro. One principle it is important to remember, we should not attempt by one method what can be better done by another.

Lithography.

ALLIED TO ENGRAVING IS LITHOGRAPHY; THE ART OF TRACING UPON STONE A DRAWING FROM WHICH IMPRESSIONS CAN BE PRINTED.

ALTHOUGH a German invented it, lithography is a French art, French by the qualities it demands; quick observation, facility, esprit, the use of a lively, animated language, which, for fear of wearying, refrains from saying all, and a superficial manner of expressing profound things. The word *esprit* has here two significations. It means not only the ability to catch delicate relations and show their brilliancy by comparison or contrast, but also the talent of perceiving the essential of an image, that which is characteristic of it. Lithography, like conversation, demands spirit in the foundation, and wit in the form.

It seems as if Nature, the better to secure the solidarity of the human race, pleases herself by producing in one country what is necessary to the genius of another. Lithography, which would seem to have been created expressly for the artists of France,

was discovered in Bavaria, and could not have been elsewhere, since there was a condition indispensable to its invention — the existence of a compact limestone, neither too hard nor too soft, with smooth surface, fine grain, but rough enough to rasp the pencil. This stone is found in perfection only in the quarries of Solenhofen, in Bavaria, where for ages it has been used for house-floors. At Munich all the halls are paved with it, and it was in noticing the fineness and polish of these stones that a dramatic author — Aloïs Senefelder — a native of Prague, invented lithography.

Wretchedly poor, this man of inventive genius, sustained by German perseverance, had the strange idea of printing his own works by engraving them with aquafortis upon a plate of copper. He was too poor to buy more than one plate and was frightened to see its thickness diminishing as he effaced one page to begin another. He was trying to substitute some cheaper material for the copper when accident put him upon the road to his discovery.

One day when at work, his mother asked him to write the washing-list for the laundress. His paper had all been used for proofs. Having at hand a stone he had just polished he wrote the memorandum upon it, intending to copy it. The ink he used was varnish, that is a mixture of wax, soap, and lampblack. Having copied the writing, when about to efface it, it occurred to him to see what would become of it if he poured aquafortis upon the stone.

The level of the stone was lowered everywhere except upon the parts covered with the ink, so that the writing appeared in relief like a wood-engraving. That was the beginning of the invention. It remained to prove, by turning it to the profit of art, the property the stones of Solenhofen have of absorbing greasy substances, consequently of rendering inaccessible to dampness all traces left upon them by pen or pencil.

Lithography was invented in 1799, but perfected chemically and mechanically by Engelmann, — the first lithograph printer in France, — Motte, Lemercier, and the Count de Lasteyrie, whose names are inseparably connected with lithographic art.

The advantage of the lithograph is that, better than any other method, it puts in relief the genius, the characteristics, the temperament of each master, because it does not require the intervention of a foreign hand and is capable of representing subjects the most diverse.

It is an art that a single generation saw born and fall into desuetude, but before passing away it made the tour of our epoch, reported its thoughts, its customs, its elegancies, its vagaries; Devéria used it gracefully to illustrate the life of the boudoir, Gavarni to represent the comedy of his time. Daumier stamped upon it the grimace of caricature, with it Raffet put armies in the field. This easy talk — lithography — Raffet elevated to the sublime in the "Réveil," a strange dream in which, like ghosts, ap-

pear the barefoot volunteers of '92, the sergeant of Marengo, the ensign of Austerlitz, the sappers of the Beresina, the grenadiers of Montmirail and Champaubert. In the "Night Review," they reappear, armed, cuirassed spectres, grouped under the funereal light of the other world.

At the moment of being abandoned by painters, lithography became, in France and Germany, a variation of engraving; it deserved well of art by translating by the hand of Lecomte, the charming thoughts of Prudhon, and the Ossianic dreams of Girodet; under the delicate pencil of Sudre, the "Sistine Chapel" of Ingres; and upon the stones of Mouilleron the famous "Night Watch" of Rembrandt, with its mysterious effects that the mezzotint cannot give with vigor, and in which the light, by turns lost and found again by the scratching-knife, hollows fantastic depths to which the reliefs of form and the accents of touch fasten themselves.

Woe to the societies that allow lithography and engraving to perish. They are the daily papers that constrain us to live, if but for a few minutes, in the regions of art and the ideal; they educate the people gratuitously, manifest the beautiful, teach history, making it intelligible to the most illiterate, the humblest, by giving them the *sight of ideas.*

Conclusion.

The more we reflect upon it, the more clearly we perceive that man created the first arts by the reaction of an innate sentiment, that of order, proportion, unity, against the opposite characteristics presented by inorganic nature — infinite complexity, the absence of visible proportion, the immensity of apparent disorder. Let us imagine, if possible, what passed in the mind of man when he appeared on earth after the frightful cataclysms that had thrown it into confusion. Burned by volcanoes or drowned by deluges, the terrestrial globe might present the spectacle of the sublime, but man bears within himself the elements of the beautiful — order, proportion, harmony. Sovereignly free by imagination and master by virtue of intelligence, he was none the less subject to an admirable order, the order which in his body is symmetry, in his mind reason, in his movements equilibrium.

Thus made, man invents successively all the arts. Under his hand inert substances express beliefs and thoughts, arranging stones according to certain laws, imprinting upon them by means of symmetry the stamp of unity, he communicates to them an artificial proportion, a sort of organism that renders them expressive, and Architecture is invented.

Measuring sounds, putting into them a rhythm marked by the beatings of his own heart, he brings them back to the unity of sentiment and creates Music.

He arranges the trees, directs the flow of waters, regulates their fall, prunes the wild plants, produces new flowers, and converts the savage wastes into a vast landscape-garden.

Wishing to imitate the human figure, man has no longer to introduce order, proportion, unity, of which he is himself the most striking model; but correcting the errors of individual nature, he uses it to reconstruct the species, and ascending thus, through the innumerable accidents of life, to original unity, to primitive and perfect proportions, he invents Sculpture.

Does he wish to fix, by means of forms and colors, the features of a creature that is dear to him, or the memory of an action that has moved him, he begins by inclosing the desired image in a frame that separates it from all other images; he puts order into it by arrangement, proportion by drawing, unity by the distribution of light, and finds a new art — Painting.

The arts were created then not to imitate nature, but to express the human soul by means of imitated nature.

And what noble imitation, how independent it is in all the arts. In Architecture subject to no model, not copying created things, it imitates only the supreme intelligence that has created them. It studies

the thoughts that presided over the formation of the human body. In Music it makes us listen to what it is impossible to understand; with sounds it paints the night, dreams, the desert; and, as Rousseau says, "with noise it expresses silence."

More imitative because it has an obligatory, inevitable model, Sculpture forbids the pushing of imitation to the utmost; it uses the weight of marble to represent the lightness of hair, suppresses the fugitive look of the eye but insists upon the permanency of the mind, imitates natural forms but to draw from them more perfect, ideal forms.

Painting, more imitative still than sculpture, departs from nature by an enormous license — figuring length, breadth, and depth, upon a flat surface.

Thus all the arts born in the mind or heart of man are so elevated above Nature, that the more literally and servilely they copy her, the more they tend to degrade and destroy themselves. The arts of design, in their highest dignity, are not so much arts of imitation as of expression. And if the photograph is a marvellous invention without being an art, it is because in its indifference it imitates all, and expresses nothing. Where there is no choice, there is no art. Gathering together features scattered in the real world, and lost in the immensity of things, the artist makes them serve the expression of his thought, bring it to the light of day, plain, clear, visible, sensible, one. Reality contains only the germs of beauty; from it he sets free beauty itself.

Thus the artist is superior to nature. He unravels what is entangled, lights up what is obscure, compels the silent to speak, and if he wishes to imprint upon his representations the stamp of grandeur, he purifies the real from the accidents that have corrupted it, the alloy that has adulterated it; abridges what is diffuse, simplifies what is impoverished and complicated by detail, and in simplifying aggrandizes it. In a word, in natural truth he discovers typical truth — style.

It is nevertheless true that, in the arts of design, painting especially, there are works that charm by their naïveté alone, having an unexpected and spontaneous grace in certain creations, in which, the portrait sufficing, the type would be out of place. Style is not befitting everywhere. If one wishes to give to forms the savor of the accidental, he emphasizes detail, if grandeur is the object, he simplifies. Notions of æsthetics are so obscure, so little diffused, that it is believed style is irreconcilable with nature, that the expression of life cannot be found outside of the individual who alone is living; that the ideal is the imaginary and there is nothing true but the real.

What is a living being? It is a being all of whose molecules are arranged in a certain order around a centre, so arranged that their separation is impossible. The idea of the being existed before the being and will persist after it; before there were individuals there was a type; before there were horses

there was the type of a horse, since all horses in spite of accidental differences, resemble each other so nearly as never to be confounded with other races. They belong to the same family, originated from the same stock, attach themselves to a primitive exemplar with which they have maintained a common resemblance, generic, unchangeable. This primitive exemplar is the ideal.

The ideal then is the prototype of all beings of the same genus; virtually it contains the individuals that exist, those that have existed and those that will exist. It is permanent, they pass away; it is invariable, they change; it is one and identical, they are unequal and innumerable; it is immortal, they perish. Real beings are casts, more or less imperfect, from an ideal mould eternally engraved upon the divine thought. To idealize the figure of a living being is not to diminish its life, but, on the contrary, to add to it the accents of a more abundant, higher life, discovering in it characteristic features, the essential of its race. To idealize the real is to take it from time, to manifest what is eternal in that which is perishable.

If the types of perfection were only a dream of the mind, if the artist were not led to them by long and profound study of living nature, if the visible and the known were not his point of departure in lifting himself to the unknown and invisible, his creations would be only cold phantoms, because life would be absent and the ideal would be imaginary.

But when the artist has sought the type, the product of sentiment and thought, in a being that is a child of life, he is senseless to believe, to say that the ideal is a frozen conventionality, a vague and vain chimera.

Let us guard against thinking that principles are bonds to freedom, a shackle to genius. Reynolds compared them to the solid armor, that to the feeble warrior is a burden, but that robust men bear easily as a defence, even as a decoration. Far from being embarrassed by æsthetic laws, in some respects they will give the artist more liberty by freeing him from the restraint of uncertainty, the hindrance of obscurity. The principles of art are not of inflexible rigor. The exceptional, the accidental, the irregular are everywhere, even in the machine of the universe, that nevertheless is not shaken by them. Often the heavens are traversed by brilliant meteors that it would seem must derange the concert of astronomic laws; in the numbers that express the revolutions of our planet, there are fractions that are apparent errors, which in time correct themselves so that there is no dissonance that does not resolve itself into the universal harmony. So in the realm of art, there is room for the happy deviations of liberty, for the contradictions of genius, and we may rejoice when they introduce novelties that seem to falsify tradition, but really augment its treasures.

But will the perfection of the type ever be attained? Will the art of man finally discover, in all

its splendor the primitive exemplar of creatures? Shall we ever see entirely removed the veil lifted by Grecian genius, the veil that covers the mysterious and sacred model of which we have within us a confused, obscure image, as if sometime we had "contemplated beings in their essence and dwelt with the gods." It may be that the day in which the curiosity of the human soul should be satisfied, the day in which man should possess in their fullness the truth he seeks, the happiness he hopes for, the beautiful he aspires to, life would be aimless; and humanity satiated, inactive, useless, could only pass away or be transformed into a higher order of creation. But were it true that the extinction of the human race would be consequent upon the realization of its utopias, our world certainly cannot be near its end.

Devoted more than ever to the worship of the real, it carries the taste for it into the arts; hence the gross naturalism that under the pretext of showing us the real truth, invites the passer-by to look at flagrant crimes of vulgarity and indecency instead of the chaste nudities of art. Hence also the usurpations of photography, whose eye, so clairvoyant in the world of matter, is blind to the world of mind.

That will be but for a time. New horizons will open to the eyes of the coming generations; already we perceive them, we who wander on the confines of the future. It seems to us that æsthetics, a modern

science, although born in the meditations of an ancient poet, the pupil of Socrates, will henceforth serve to enlighten the teaching of the fine arts. After having existed in the condition of presentiment, of intuition, in the soul of great artists of the past, the principles drawn from their works will guide future masters. Now last, the philosophy of the beautiful will resume its natural place, the first. Once found through the glimmering of sentiment, the darkness that envelops it, synthesis will, in its turn, be the guiding torch.

If future artists shall lack the grace of the precursors, the charm inherent in things that one divines and in the hope of the beautiful, in lieu thereof their march will be firmer, surer, and their route being shortened, life will be longer. They will not be slow to follow this humanity become so breathless, so eager to live. Strong in accumulated riches, and acquired facility, they will have time to cut new facets on the diamond — art. In the mean time, thank Heaven, genius has not abandoned this earth. We have always had chosen creatures, winged natures, masters. We have them to-day, we shall have them to-morrow. We cannot doubt it; from another Ictinus another Phidias will be born, and other Raphaels who will find new ways of being sublime For neither the beautiful, nor the ideal, nor style are dead, because of their very nature they are immortal; and although in certain periods of decadence

they seemed threatened with destruction, they have only slumbered, like the Evangelist, whom the poetry of the Middle Ages represents to us as sleeping in his tomb, where, cradled by dreams, he awaits the awakening angel.



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